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My Dear Mr Stewart

Arise from
past events of the depths of
tenderness in your heart
and know your earnest
energies are put forth in
attempts to relieve the victims
of sorrow and disease, I
send you one of the first
copies of my work on

the care and treatment
of epileptics. I venture to
hope that some of the
suggestions or principles the
book contains may aid
you in your efforts to
broaden the sphere of true
benevolence so as to bring
relief to ~~that~~ great numbers
of neglected human beings
now suffering from the
dead disease of
epilepsy.

I am

With sentiments of high

Esteem and regards

Sincerely yours

Wm. Payer Litchworth

Postage at St. }
Nov 23rd 1899 }

P.S. Should you desire a few
extra copies of the book for
your friends I shall be
pleased to send them to you.
L

And now remains,
That we find out the cause of this effect ;
Or, rather, say, the cause of this defect ;
For this effect, defective, comes by cause.

SHAKESPEARE.

CARE AND TREATMENT

OF

EPILEPTICS

BY

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"RELIEF AND REFORM," "HOMES FOR HOMELESS CHILDREN," ETC.

ILLUSTRATED

G. P. PUTNAM'S SONS

NEW YORK AND LONDON

The Knickerbocker Press

1900

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Entered at Stationers' Hall, London

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The Knickerbocker Press, New York

TO
THE MEMBERS OF THE NATIONAL ASSOCIATION
FOR THE STUDY OF EPILEPSY
AND THE CARE AND TREATMENT OF EPILEPTICS,
WHOSE HUMANITARIAN PURPOSE AND SCIENTIFIC AIMS
ENLIST MY EARNEST SYMPATHY,
THIS
WORK IS RESPECTFULLY DEDICATED.

PREFACE.

AT the National Conference of Charities and Correction held in Nashville, Tennessee, in 1894, the author of this volume read a paper entitled "Provision for Epileptics;" and at the National Conference of Charities and Correction held in Grand Rapids, Michigan, in 1896, he read a paper on the "Care of Epileptics," intending to show the advance that had been made in the care of this class during the interval between the two conferences. Neither of these occasions afforded an opportunity to deal with the subject as broadly as it demanded. With a view to greater elaboration, and to show the further advance that has been made in the care and treatment of this unfortunate class, the present work was undertaken. It is hoped that the conclusions drawn from extended observation and the records of results achieved by those who have had practical experience in the treatment of epilepsy, may prove of some benefit to the sufferers from this dread disease.

In the preparation of this work the writer has received valuable and kindly aid from many of the persons whose names appear in the following pages, and from others, to whom he desires to make grateful acknowledgment.

GLEN IRIS, PORTAGE P. O., N. Y.,
September 2, 1899.

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CARE AND TREATMENT OF EPILEPTICS.

CHAPTER I.

GENERAL PRINCIPLES.

IN the enlarged sphere of the charities of this day of expanding philanthropy it may be said that the claims of every afflicted class except the victims of the mysterious disease of epilepsy are fairly recognized. The insane, the feeble-minded, the deaf and dumb, the blind, the paralyzed, defective children, and other dependent classes receive sympathetic attention. More has been done for epileptics in the Continental countries of Europe than elsewhere. A beginning has been made in caring for them properly in England, and something has been accomplished for them in America; but the great mass of sufferers are still left without that special care which an enlightened civilization demands.

Like insanity, epilepsy in ancient times was regarded with superstitious awe, and the belief was generally held that the subject of the disease was possessed by a demon from which he vainly strove to free himself, or was suffering punishment inflicted by a deity whose anger he had incurred. Hippocrates, however, did not accept this theory, and boldly asserted that the disease originated from natural causes and that men regarded it as of divine origin purely from ignorance.

Down to a comparatively recent period some of the numerous remedies prescribed for curing epilepsy were so absurd that it seems strange they should have been resorted to by persons of influence and reputed intelligence. The treatment of the disease appears to have embraced almost every imaginable remedy, including the most extraordinary and repulsive mixtures. Among these may be mentioned, by way of illustration, a prescription compounded of certain roots and the skull of a criminal who had suffered capital punishment. This was a popular remedy as late as the eighteenth century. A preparation of earthworms and a human skull, prescribed as a remedy by the physician of King William III.; rum in which snakes' heads had been steeped; wheat flour mixed with dew gathered on the morning of Saint John's Day and made into a cake; and a powder made from the burned remains of magpies;—these were held at one time to be valuable. As a preventive of epilepsy, coral powder mixed with nurse's milk, and given to an infant soon after birth, was a common prescription.

Progress in Scientific Knowledge.—From the dawn of history the disease has been enveloped in mystery, a mystery which is not even now dispelled, and into which it may be said the light of science has not practically penetrated. Only during the past twenty years has much advance been made in scientific knowledge of the subject, and only within a period of between thirty and forty years has any considerable effort been made to ameliorate the condition of epileptics. So high an authority as Dr. Ira Van Gieson says: "All the facts which the pathological anatomist and the physiological chemist have gained in the study of this dire malady give no explanation of the *process* that gives rise to the epileptic phenomena." After discussing various theories as to the causes of epilepsy, Dr. Wildermuth, of

Stuttgart, writes: " We should still be in ignorance of the real nature of epilepsy even if we knew the cerebral origin of the separate attacks. Anatomic investigation has as yet shown us no lesion which can be deemed characteristic for epilepsy."

Characteristics of Epilepsy.—At the outset it may be proper to refer briefly to the clinical characteristics of epilepsy. A description of its manifestations is thus set forth by Dr. Frederick Peterson:

" Epilepsy is a functional disease of the brain, in which the chief feature is a sudden loss of consciousness. The loss of consciousness may be complete or incomplete. Generally it is accompanied by spasms. The type of epilepsy most familiar to laymen is that called by physicians *grand mal*. The patient falls in an unconscious state, often giving a sharp cry as he does so, and as he lies prone goes into a convulsion lasting a few moments or longer, rarely more than five minutes. The epileptic has such ' seizures ' or ' attacks ' of spasms at variable intervals, sometimes frequently every day, sometimes only once weekly or once monthly, and sometimes only two or three times in a year. There is no regularity in their onset, and this unexpectedness or unpreparedness is one of the most trying features of the malady. The attack comes like a flash of lightning from a clear sky, constituting therefore a grave danger, in that the patient may be near a declivity, over deep water, close to a fire, or in some other position where a seizure may lead to serious injury or accidental death. After the spasms have passed, the patient is in a somewhat dazed state, and is apt to sleep for a half-hour or so. Then he rises and goes about his duties as before. A less common and familiar form of epilepsy is that known to physicians as *petit mal*, or light attack. In this, consciousness is also lost, but ordinarily

only for a second or two. The patient does not fall, as a rule, and has no spasm, but his face may twist to one side, or his hands perform some automatic act.

“Not infrequently epileptics have some warning of an approaching attack. They have a queer feeling in the stomach, chest, or throat, a dizziness in the head, a flash of light before the eyes, a sensation in one of the arms or legs, a ringing in the ears, or some other sign with which they become familiar as the warning of the onset of a fit. Occasionally this warning is sufficiently prolonged for the patient to call to some one or to seek a place to lie down. As the patient falls his face is pale and his pupils large, but when the spasm begins, the face grows dusky and red and the veins distend, as the blood rushes into the head. The breathing becomes slow and difficult, owing to the spasm in the muscles of the chest; and noisy, snoring, or stertorous from spasm in the muscles of the throat. The teeth are clenched tightly, and the saliva in the mouth is made into froth at the lips by the struggle for air. If the tongue is caught between these clenched teeth, it is apt to be bitten and the froth is bloody. In very serious cases these spasms may be so severe as to fracture the bones, dislocate the jaw or the shoulder, or cause rupture of the engorged blood-vessels in the flesh or in the brain. Frequently there is involuntary evacuation of the bladder or bowels. Some patients have both kinds of attacks, mild ones sometimes, and severe ones at others. Occasionally there will be a sudden outbreak of a long series of severe attacks without an appreciable interval between them, hundreds of seizures in a few hours. This state is known as the *status epilepticus*, and in this the patient may die.

“There is a peculiar automatic or subconscious state observed at times in epileptics, either before or after an

attack. The patient acts as if he were in a dream. For the time being he is actually a somnambulist, and may perform quite complicated acts without consciousness of what he is doing. Since such acts may be at times harmful to himself or others, this state is fraught with danger.

“ Some 10 per cent. of all epileptics become so insane as to require supervision at home or in asylums. Hence the epileptic neurosis in an individual renders him about thirty times more liable to insanity than if he were normal.”

Dr. Wildermuth describes the different phases of epilepsy in the following language:

“ The name epilepsy is used to express various conditions which, pathologically considered, are entirely unlike. We must differentiate between—

“ 1. True Epilepsy (*Epilepsia vera*)—Idiopathic Epilepsy.

“ 2. Epilepsy following poisoning, especially by alcohol, which presents similar clinical symptoms.

“ 3. Cortical Epilepsy (*Epilepsia corticalis*), resulting from local disease of the motor cortical area. A frequent form of Cortical Epilepsy is that which follows infantile polioencephalitis.

“ 4. Reflex Epilepsy, which has its origin in the morbid irritation of a peripheral nerve.

“ Of these diseases True Epilepsy occurs most frequently—in about 80 per cent. of all cases. The next in frequency of occurrence is the epilepsy following polioencephalitis—in 14 per cent. of all cases. The other forms of Cortical Epilepsy are seen less frequently, and Reflex Epilepsy is a rare disease.

“ The main symptoms of True Epilepsy to be noted are periodic attacks of a morbid change in consciousness, often accompanied by tonic and clonic muscular spasms.

“ In the majority of cases epilepsy leads to permanent mental disturbances, consisting of intellectual weakness of all degrees, from a slight diminution of mental power to complete idiocy. Not infrequently this is accompanied by morbid changes of character. Severe forms of moral perversion occur less often than is commonly supposed. Permanent decrease in intellectual and moral tone is expressed in the term Epileptic Degeneration.

“ In addition to permanent degeneration, there occur in epileptics more or less acute mental disturbances. The most important point in connection with these, according to Siemerling, is a dream-like state of consciousness of varying duration and form, with or without delusions, memory being lost or only clouded. These ‘ twilight states ’ are especially feared because, while they endure, deeds of violence are not infrequently committed. These acute psychical disturbances may follow pronounced epileptic attacks or occur in their stead as equivalents. In rare cases they are the only manifestations of the disease. We observe in epileptics also acute psychical disturbances without change of consciousness. These always appear in connection with attacks, either as a morbid mood which lasts unchanged during a series of attacks, or which is different before the attack from what it is afterward.”

It is fortunate that the form of epilepsy designated as “ psychical ” epilepsy is not of common occurrence.¹

The records of disordered consciousness show many strange experiences. One of these, taken from the *Medical Minutes* of the Craig Colony, is an apt illustration.

A young civil engineer, who later in life became a loco-

¹A remarkable case of psychical epilepsy which came under the personal observation of Mr. F. B. Sanborn, of Massachusetts, was described by him at the American Social Science Association in 1897, and reported in the December *Transactions* of that year.

motive engineer, fell a victim to this dangerous form of epilepsy while at work on the Brooklyn Elevated Railway, where he was employed for three or four years, until discharged on account of this malady. One day he was seized with a fit while travelling on the railway to Newburg. Coming to a station, he deliberately left the train, walked into the telegraph office, and, being a strong man physically, managed to eject the two operators who were on duty, and who hastily fled. Knowing something of telegraphy, and having the room entirely to himself, he proceeded to send a message to a man in the main office with whom he was acquainted. After copying the message he had sent and placing the copy in his pocketbook, he arose, locked the door of the room, and went to his home in Newburg, taking the key with him. When aroused by a policeman next morning he knew nothing of what had occurred. He remembered the attack coming on, but could recall nothing of what happened afterward, nor could he tell how he managed to get home. The key in his pocket and also the copy of the message were indubitable evidence of the truth of the officer's statement. Mental automatism, especially when a patient is addicted to bromide, imparting as this does a whiskey-like odor to the breath, is frequently confounded with intoxication. To strengthen the resemblance the victim's manner is frequently quarrelsome, abusive, and insulting. This unfortunate engineer had been so frequently arrested for drunkenness that his friends had a card fastened under his coat inscribed, "This man is an epileptic. Send him home." This was signed by a reputable physician. In earlier life he had been a hard drinker. He is forty-three years old, married, and the father of six children, two of whom, sad to relate, were born after his epileptic seizures.

Age at which Disease Develops.—From statistics carefully compiled by different authorities the important fact has been demonstrated that epilepsy is essentially a disease of the young. It is equally apparent that, unless early efforts are made to arrest the disease, mental and physical deterioration are inevitable.

Dr. Hare sums up the conclusions of a number of distinguished authorities as follows: "Three fourths of all cases of true idiopathic epilepsy begin under twenty years of age, and nearly half of all cases between ten and twenty, the greatest number being at fourteen, fifteen, and sixteen. One eighth of all cases begin during the first three years of life, but after twenty the number falls very low. . . . Of 1288 cases collected by nine French authorities, in 486, or over one third, the disease began between the tenth and twentieth years. Hasse, in the 1000 cases collected by him, found that 75 per cent. were at the onset under twenty years of age. According to Nothnagel, the great majority of cases occur between seven and seventeen years, not only in hereditary epilepsy, but in the other forms."

It is the experience of Dr. Wildermuth that epilepsy develops in 34 per cent. of cases between the ages of one and five years; in 75.5 per cent. of cases, between one and fifteen years; in 82.2 per cent. of cases, between one and twenty years. For the period between one and twenty years, Tigges, Pelmann, and Mandel give from 70 per cent. upward.

Of the 234 patients received into the Bethel Colony at Bielefeld during the year 1895, it is stated that 145, or about 62 per cent., suffered from attacks before they were ten years of age, and 178, or 76 per cent., before they were fifteen.

As the result of a study of 342 cases coming under his care

and 437 cases that had recovered before coming under his observation, Dr. A. W. Wilmarth, Superintendent of the Wisconsin Home for the Feeble-Minded, found that "when the first attack of convulsions occurred before the third year of life, in a little more than half the children attacked they ceased before the age of puberty. When the spasms persist or begin after puberty, recoveries are rare."

From the opening of the Ohio State Hospital for Epileptics in 1893 to November 30, 1898, there were admitted to that institution 1295 patients. The ages at which they suffered from the first attack of epilepsy are thus given:

In infancy.....	339
Between five and ten years.....	194
" ten and fifteen years.....	296
" fifteen and twenty years.....	173
" twenty and thirty "	159
" thirty and forty "	61
" forty and fifty "	20
Over fifty years.....	14
Unknown	39

Heredity.—As to the causes producing epilepsy there is an interesting field yet to be explored. Those arising from heredity are numerous; in fact, this source of epilepsy, idiocy, and crime has reached threatening proportions. The vast number of degenerate persons that now burden society, whose defective organization is traceable to hereditary causes, and who continue to transmit their weaknesses,—physical, mental, and moral,—presents a difficult and important problem to social scientists.

In tracing the histories of imbecile children, Dr. G. H. Knight, Superintendent of the Connecticut School for Imbeciles, found that epilepsy existed of itself or as a complication in over 60 per cent. of the cases examined. He

expresses the opinion that epilepsy is one of the most active factors in the result called imbecility. As illustrating the evils resulting from indiscriminate marriages, Dr. Knight gave the following facts in 1886: "From my own knowledge I can cite the case of an epileptic woman who became the mother of fifteen defective children. Eight died in infancy from lack of vitality, two inherited the epilepsy, two were fairly teachable imbeciles, and the other three had sufficient intelligence to marry and reproduce, according to the laws of heredity, the mother's experience. This instance is only another proof of what we must all believe—namely, that like produces like; and, therefore, as a natural sequence of things, epileptics in the majority of cases must produce defective children."

Dr. J. B. Maxwell, of Illinois, says: "I believe heredity has largely to do with epilepsy. In a careful examination of the family history of epileptics, a very large percentage of parental relatives, perhaps even $66\frac{2}{3}$, will be found suffering from some nervous affection or eccentricity, one third from insanity."

Since the opening of the Ohio Hospital for Epileptics, a study into the causes of epilepsy has been pursued with painstaking care. Of the 1295 patients admitted between November 30, 1893, and November 30, 1898, it was ascertained that 232, or about 18 per cent., had relatives who were subject to epilepsy, and that 103, or about 8 per cent., had relatives who were subject to insanity. In a large percentage of cases the relationship was that of parent, grandparent, uncle, aunt, brother, or sister; in some instances it was more remote.

The condition of the offspring of 62 male and 74 female epileptics is given by Echeverria, as follows: Of 535 children

- 4 % were still-born.
- 36 % died in infancy from convulsions.
- 5 % " " " other diseases.
- 15 % became epileptic.
- 2 % became insane.
- 7 % suffered from paralysis.
- 9 % became hysterical.
- 1 % became choreic.
- 1 % had strabismus.
- 20 % were normal.

Dr. Wildermuth says: " However much opinions may vary as to the nature and actual causes of epilepsy, it is certain that in the majority of cases (in at least 60 per cent.) the disease develops as a result of morbid hereditary tendencies."

All familiar with rural life are aware of the care agriculturists exercise to mate animals in such a way as to secure vigorous progeny, comely in shape, docile and intelligent; but in the procreation of the human species the fact that the condition of the body may determine whether a life be one of wretchedness or usefulness is but lightly considered or entirely overlooked. The same man who has exercised thoughtful discretion in mating dumb animals will approve the marriage of his son or daughter under conditions that will, in the judgment of his physician, result in degenerate offspring. Pecuniary considerations, advantages of social position or title, outweigh everything else, and there is brought into the world through pride, ambition, or mercenary motives degenerate progeny. One would suppose that the development of a high physical, mental, and moral standard of the human species would be considered in every marriage. On the contrary, it is usually a matter receiving no thought whatever. Unhappy results from this indifference are familiar to all and are constantly occurring in the history of the great as well as the humble.

It is the opinion of Dr. Wildermuth that every physician should on principle advise against the marriage of epileptics, even in the case of light forms of the disease. He says: "It is a popular belief that marriage acts as a curative agent in epilepsy; this is not the case. Epilepsy has never been cured or even improved by marriage, and such unions always result disastrously in one way or another."

In the Twenty-fifth National Conference of Charities and Correction, Dr. James C. Carson, Superintendent of the Syracuse State Institution for Feeble-Minded Children, gave expression to the following views upon this subject: "Considering the vast import of insanity, epilepsy, and feeble-mindedness in relation to their own and other forms of degeneracy, a law prescribing some extraordinary penalty should be upon the statute-books of every State for the seduction of any insane, epileptic, or feeble-minded woman; and, further, every State in the Union ought surely to prohibit the marriage of any person of either sex belonging to any one of these classes."

Legislation to Arrest Degeneracy.—The opinion is growing that legislative interference should be invoked to check the evils of degeneracy. In 1895 an act was passed by the General Assembly of Connecticut, prohibiting, under penalty of three years' imprisonment, the intermarriage, where the woman is under forty-five years of age, of a man or woman, either of whom is epileptic, imbecile, or feeble-minded, or the cohabitation of a man with any female under forty-five (not being his lawful wife) who is thus afflicted.

Pennsylvania has recorded the following act upon its statute-books:

"No insane or feeble-minded person and no person who from natural causes as distinguished from accidental causes shall have been insane in the past, and no person who shall

hereafter have been twice convicted of felony as defined by the laws of the commonwealth, shall be capable of marriage in wedlock, and any clergyman or civil officer who shall knowingly solemnize such marriage, and any person who shall knowingly assist in procuring or abetting the same, including the parties to such marriage, shall be guilty of a misdemeanor and shall be subject to imprisonment for six months and a fine of five hundred dollars, both or either, at the discretion of the judge before whom the offence shall be tried."

It may take time to educate the public mind to the importance of enforcing such statutes, but the necessity of such would seem to be obvious.

Climatic Influences.—As to the effect of climate upon the disease, it is asserted that the Alpine and sub-Alpine departments of France furnish an unusual number of subjects, and that in certain northern countries—Greenland, Scandinavia, and the region along the Baltic—epilepsy occurs with special frequency, but there are no satisfactory statistics to verify the latter statement. It is, however, established that epilepsy exists in all countries and among all peoples.

Racial Differences.—The extent to which different races are affected by epilepsy is a question to which some attention has been given. While the colored population of the South has until recent years been less subject to insanity than the white population, eminent Southern physicians tell us that the same is not true as regards epilepsy. Of about 800 insane negroes cared for in the Central State Hospital at Petersburg, Virginia, about 100 were epileptics, a much larger proportion than is found in similar institutions for white people.

"In the Territory of New Mexico the native Mexicans

are subject to epilepsy far more than American or English-speaking peoples.”¹

Ratio of Epileptics to Population.—It is not possible to state with accuracy the number of epileptics in different States and countries, for the reason that statistics respecting them have been collected only within certain areas of territory, and such statistics as are gathered fall short of the real number, owing to the reluctance of those suffering from the malady and their friends to reveal their affliction, and to the fact that mild cases are seldom recognized.

In 1897, Dr. F. M. Powell, Superintendent of the Iowa Institution for Feeble-Minded Children, endeavored to ascertain the number of epileptics in Iowa. There were reported to him by 800 different physicians with whom he was in special correspondence 2446 epileptics. In 70 out of 90 poorhouses² heard from there were 191, and in hospitals for the insane and institutions for the feeble-minded there were 360. He concludes that a conservative estimate of the number of epileptics in Iowa would be 3360, or 1 to every 600 of the population. Dr. Peterson estimates the ratio of epileptics in New York State as 1 to every 500 of the population. Dr. John Morris concludes that there is not less than 1 to every 500 of the population in Maryland, including children and adults. Dr. Wm. F. Drewry, who, during a few years past, has endeavored to arrive at the number of epileptics in Virginia, concludes that there are 3000 in that State. This is a ratio of a fraction less than 2 to 1000 on the basis of the last census. Mr. G. Penn Gaskell, Secretary of the National Society for the Employment

¹ Rev. Mary J. Borden, State Corresponding Secretary National Conference of Charities and Correction.

² Poorhouses, almshouses, and county infirmaries are used throughout these pages as synonymous terms.

of Epileptics, estimates the ratio to population in England to be about the same.

From records made in the examination of over 20,000 recruits at Aaren in Switzerland in 1887, it appears that 2.42 to 1000 were rejected because they were epileptics. An average of the examinations for the years 1889-90-91 shows that 2.57 to 1000 of those examined were rejected for the same reason. Statistics collected from Mecklenburg-Schwerin give the ratio to population as 1.5 to 1000. Lepointe has estimated the ratio in the Department de l'Allier, France, as 1.169 to 1000. In Belgium, Morel gives the ratio of epileptics to population as 1 to 1000. Pastor von Bodelschwingh fixes the ratio in Prussia as 1.5 to 1000. Hirsch gives the ratio for Italy as 2.4 to 1000. The statement of Pelmann, who has given much attention to the subject, is generally accepted, that 1.5 to 1000 inhabitants does not exceed the actual number.

Applying this ratio to the following States and countries, and taking the population as given by the last census or estimating it to the present time, there are of epileptics in Germany, including Prussia, about 74,000, in France 57,500, in Switzerland 4400, in Italy 46,000, in European Russia 138,000, in England 46,000, in Scotland 6000, in Ireland 7000, in the United States 113,000. It is not to be inferred that all of these large numbers of epileptics should be placed in asylums. What percentage of them require institutional care for their own welfare or that of society we have no statistics to determine.

Lack of Provision for Epileptics in the United States.—In none of the forty-five States of the Union, excepting Ohio, New York, Massachusetts, New Jersey, and Texas, is there a State institution exclusively for the care of epileptics. The United States Government has provided no separate

institution for sane epileptics. Insane epileptics are provided for in the Government Hospital for the Insane in the District of Columbia in buildings constructed for their care.

Wherever there are institutions for the feeble-minded there are usually more or less of the epileptic class among the inmates. Dr. Powell gives the number of epileptics in institutions for the feeble-minded in the United States as about 1200. In some institutions of this class he has found upwards of 30 per cent. of epileptics. In the Iowa institution there are 178 among the 690 inmates. There are a few epileptics in the New York State Institution for Feeble-Minded Children, at Syracuse, but they were admitted under exceptional circumstances or became epileptic after admission. It is contrary to the rules of the institution to receive them. The same may be said of the Massachusetts School for Feeble-Minded, at Waltham, in which, at the date of January, 1898, there were seventy-one epileptic children. All institutions for the feeble-minded in the United States having buildings constituting a distinct department for epileptics are mentioned in this work.

It is coming to be recognized, if it has not already been conceded, that institutions for the feeble-minded do not meet the requirements for epileptics. Experience in institutions of this kind has demonstrated the desirability of having separate wards for epileptic children and the advantages resulting therefrom both to the epileptic and the feeble-minded. From separate wards a development towards separate buildings has been natural, as seen in California, Minnesota, and elsewhere. Further development along the same lines may lead eventually to the establishment of entirely distinct institutions for epileptic children. Children, in any event, must be separated from adults, the

former being an especially hopeful class and susceptible of great improvement. A better medical system is obtained for epileptic children by separating them from the feeble-minded. They also require a different diet and different educational methods. Moreover, an intelligent epileptic child is sensitive about being classed with the non-epileptic congenital idiot. The highest mental and physical improvement of the child should be kept constantly in view.

In all the States where institutions for epileptics have been established there has been immediately an overwhelming pressure for admission, some of the appeals coming from friends, and some, more pitiful, from the sufferers themselves.

Relation of the Epileptic to Society.—The epileptic holds an anomalous position in society. As a child he is an object of solicitude to his parents or guardians. The street to him is full of danger, and if sent to school he is liable to seizures on the way or in the class-room. At school his attacks shock his classmates and create confusion. He cannot attend church and public entertainments, nor participate in social gatherings with those of his own age and station. In consequence of his infirmity, the epileptic grows up in idleness and ignorance, bereft of companionship outside of the family, and, friendless, he silently broods over his isolated and helpless condition.

If the epileptic succeeds in learning a trade, business men are reluctant to employ him, and artisans will not work with him, especially if sharp-edged tools are used. I shall never forget the shock experienced, when I was a lad, in seeing a journeyman workman, a tall, manly, but sad-faced young man, fall at his bench with keen-edged tools within his reach, his dazed fellow-workmen moving in awe about him as he struggled in convulsions, with open eyes, set teeth,

and foaming mouth. He was an ambitious young man, of good character, and a skilful workman; but he was obliged to leave his position on account of his infirmity and seek a new situation, where, undoubtedly, he had to go through the same experience. In such cases there is but one result,—the breaking down of all hope and energy.

The epileptic workman having a trade, but unable to find employment, gradually sinks into a condition of public dependence. Frequently he is sent to the poorhouse, where he is brought into close association with a mixed and unsympathetic population, and where there is no special provision for his care or proper medical treatment. Here he is regarded with aversion and distrust, and is a cause of unhappiness, and sometimes of danger, to others. Not infrequently the wrong is committed of sending him to an insane asylum. The late Dr. Richard Gundry, speaking of epileptics in insane asylums, said: "However mild their forms of insanity generally, they are liable to explosive paroxysms of fury; and their epileptic attacks are shocking to witness. There can be no question that their frequent fits exercise a very unfavorable influence upon other patients of an impressionable nature. For this reason, doubtless, many who should be under hospital care are refused admittance, and drift into various nooks and corners, where God alone knows how they subsist."

The apprehension of what an epileptic may do, and the seeming necessity for his seclusion in order to protect the community, cause him in some of the American States, for lack of other provision or for greater convenience or security, to be confined in jail, thus adding to his misfortune the brand of criminality.

The adult female epileptic is not only liable to all the dangers and sufferings of the opposite sex, but, through her

helplessness, is exposed to the immodest gaze and licentious advances of the unprincipled.

For lack of suitable provision for epileptic children, many of them, bright and intelligent, find their way in some States into public care in forced companionship with the lowest class of idiots.

In the family home constant watchfulness must be exercised over the epileptic, and a wage-earner is frequently withdrawn from remunerative labor to attend him, with the consequence of a double pecuniary burden upon the family. The struggle of many a worthy family to bear such a burden and yet maintain themselves in respectability is pitiful to witness. Only a few days previous to penning this paragraph it came to my knowledge that a poor widow in the neighborhood of my home, burdened with the care of an epileptic child who required every whim to be gratified, committed suicide by drowning herself. She had found life intolerable. Every one familiar with the condition of a poverty-stricken family in which there is an epileptic member, and witnessing the settled gloom over a household where perhaps the mother is obliged to work out for hire while her heart is heavy with the dread of some horrible accident happening to her child at home, will be impressed with the change from despondency to cheerfulness after the epileptic has been removed to a colony where all the possibilities of enjoyment and improvement and usefulness that remain in his life are within his reach, and will eagerly desire that like changes might be made in numberless similar households throughout the land.

It has been forcibly said by one entirely familiar with his subject: "Throughout the whole range of human misfortune we know of nothing that can equal in its abject wretchedness the lot of the neglected and confirmed epilep-

tic, whose intellectual light is being continually diminished by the terror-full seizures, and whose physical existence is being steadily sapped and blighted by this curse of our age. The insidious character of its inception, the multitudinous causes from which it may have its origin, the subtle character of its progress, the thousand deceiving phases of its treatment, and the horrible consequences of its unchecked ravages, all combine to make epilepsy a disease condition of unusual importance."

Reasons for Special Provision.—The reasons for separate provision for epileptics are so obvious as seemingly not to require any argument to sustain them. They have been forcibly set forth by numerous writers and speakers regarded as authorities upon this subject. Dr. Rutter, Dr. Spratling, Dr. Peterson, Dr. Bullard, Dr. Sinkler, Dr. Drewry, Dr. Wildermuth, Dr. Kölle, Pastor von Bodelschwingh, and many others whose opinions may not be disregarded, have borne emphatic testimony to the necessity of providing homelike institutional care, with expert medical treatment, for this numerous and neglected class. These opinions have been so clearly and forcibly urged that we must accept them; and this provision should be made, not doubtfully, hesitatingly, and parsimoniously, but promptly and generously, in full recognition of the claims of a universal human brotherhood.

It has been thought by some that, in bringing together in one institution a great number suffering from this infirmity, their unhappy symptoms would be reflected upon one another, to the disadvantage of all. On the contrary, experience has shown that, so far from association being harmful, it awakens sympathy one for another. Moreover, in the colony, the epileptic finds himself again a part of the world's machinery, from which he had dropped out, and

hopeful aspirations take the place of despondency and gloom.

Special institutions or colonies, besides benefiting the unfortunate sufferers, may be made to serve the economy of the State. Under an advanced system of treatment, many epileptics, while rendering some return by their labor for the benefits they receive, may be, if not entirely cured, so far restored to health as to be able to earn a support after leaving the colony, and thus become productive members of a community instead of a burden upon it.

In the establishment of colonies for epileptics classification of the dependent classes is extended, and institutions organized for other purposes and not adapted to the care of epileptics are relieved of an incongruous element. Dr. John Morris, of Maryland, says: "One half of the applicants for admission to the Home for the Feeble-Minded in Maryland are victims of epilepsy. These unfortunates cannot be admitted to the institution for the reason that they are a disturbing element, and would exercise an injurious influence on the inmates, and thus retard their recovery. To treat epileptics, you must have an institution solely devoted to their care. The younger epileptics particularly require separate conditions and treatment."

In colonizing epileptics society is relieved in some measure of a dangerous element and the public safety promoted, while the procreation of degenerate offspring is brought under restrictions. Dr. Powell says: "Of all hereditary factors, except feeble-mindedness, none are so prolific in entailing a blight upon succeeding generations as epilepsy. I earnestly coincide with the opinion of those who are seeking to establish separate institutions or colonies for them, feeling that this mild imprisonment would prove a humane and effectual means of cutting off another source of the pro-

duction of, not only feeble-mindedness, but other forms of mental and physical degeneracy."

Dispensary treatment of epileptics in cities, while it ameliorates their condition, falls short of meeting their requirements. Dr. John L. Hildreth, of Massachusetts, gives the following testimony on this point: "I became much interested several years ago in the subject of epilepsy, largely because I found dispensary treatment of such cases very unsatisfactory. . . . Some member of the family would bring the patient to the dispensary, and describe the troubles that had been going on some time. He would be told the treatment must be long continued, perhaps some two or three years after the patient seems well. The poor get much discouraged at such a statement. They drift about a good deal. Whether they go to the physician at the hospital or to the general practitioner, they neglect the treatment, do not look after the diet or exercise, do not see that the patient is properly taken care of, do not report as they should; and it is hard to get these people to continue to bring patients to the hospital or the dispensary for treatment. They do not see great results at first, and cannot be made to continue. These patients should be taken in the beginning and put under special treatment, where diet could be regulated, and habits looked after, and medicine given regularly."

The peculiar nature of the disease makes its treatment by skilled experts a necessity; and in a colony better treatment can be given epileptics than by physicians in private practice. Dr. Sanger Brown, of Illinois, says: "I think most of us in practice have been struck at times with our helplessness in our attempts to relieve these people from a moral standpoint, and we are unable physically to offer a practical suggestion for the guidance of these poor unfortunate suf-

ferers. We can generally lay out work for them, such as occupational treatment, but in this particular disease, where occupation is needed more than in any other perhaps, we are perfectly helpless. We know that we cannot honestly and safely use any influence to get such people into positions of trust. Some of these persons are often men of remarkable mental ability, yet our hands are tied. One of the crying necessities of the age is that this particular class of people should be practically dealt with."

There is a decided gain to science in the opportunity afforded to study the disease under the most favorable circumstances, with a view to ascertaining its causes and the means of cure. Dr. A. E. Osborne, of California, in making an appeal to the Legislature of his State in 1887 in behalf of institutional provision for epileptics, made use of the following forcible language: "That a very large percentage of epileptic cases can be checked, and many permanently cured, I have no doubt, provided the proper means be secured for their rational treatment. . . .

"Through my office window, as I write, I can rest my eye upon the glistening dome of that noble structure, dedicated to science, which rests in quiet splendor like a mighty gem upon the brow of grand Mount Hamilton. Within it is poised that unique and matchless instrument whose mighty sweep is designed to pierce the very depths of the heavens and bring to the scientist's eye heretofore unrevealed records. But hark! Upon my ear there breaks the despairing shriek of an epileptic girl, who, frantic from the terrors of the aura, rushes towards her playmate to seize her, but reels and falls, with clenched fists and foaming lips, prostrate to the ground. And I feel as though that despairing shriek should be heard around and through the entire extent of the State, until a similar munificence to that of

Lick should build another temple to science, but dedicated to the study of the poor epileptic; and within whose walls there should be found somewhere in its armamentarium the means of exploring the hidden secrets of the mind and brain, that at last man might ravel out the tangled thread of the disease and become master of the secret, even to the cure."

Dr. Jules Morel, of Belgium, thus presents the duty of the State to this class: "It is necessary to consider that epileptics, for the most part, are born of parents who transmit an hereditary taint to their offspring, and that later on they tend to degeneracy under the influence of other causes, especially alcoholism. The parents of epileptic children, for lack of facilities or for other cause, may be considered as incapable of caring for their education and training, and it becomes the duty of the State to take the children from them and properly care for them. This is the duty of the State, both for the sake of humanity and for reasons of economy. The epileptic uncared for is exposed to all sorts of excesses. As he grows older he is likely to give way to habits of intemperance, to immorality, to violent acts; or, as is not infrequently the case, to all of these at once. The State must protect its citizens by removing the sickly and injurious elements from society and providing for them in the interest of the public and of those requiring protection."

Preliminary Action in Founding Colonies.—In establishing colonies for epileptics under State auspices in States where none exist, the first step should be to collect such statistics and information as are obtainable and bring them to the attention of the Legislature. There must be at the outset some basis for legislative action. The subject coming under the special jurisdiction of State boards of charities, the desired information can best be obtained by such boards, they

having the necessary facilities for obtaining it. With such facts and estimates of outlay for an institution presented to the Legislature and supported by a resolution of the State Medical Society or other medical organization, and by leading specialists in mental diseases, Legislatures may be induced to create a special commission for selecting a site and for taking preliminary steps for the permanent establishment of a colony. In States having no charity boards, the initiative must be taken by the State Medical and other societies, by influencing the Legislature to create a commission to gather facts and information relating to the subject and to report thereon. Following this report, the friends of the epileptic should endeavor to secure legislation creating a commission to select a site. If the first effort fails, it should be repeated again and again. This course, it is believed, if persistently and prudently followed, will result in the attainment of the desired object, although years may elapse before success is achieved.

Co-operation with Private Benevolence.—It is to be regretted that the State does not avail itself of the services of private charitable organizations in a greater degree than it does in caring for epileptics. To the extent that the work is undertaken by benevolent agencies the public is relieved of the expense of erecting buildings, and in some measure of the cost of maintenance. If duly incorporated private charities, subject to strict State supervision, were encouraged in this work by the payment of a liberal weekly per capita allowance, which need not, however, be equal to the full cost of support, much of the work could be done in this way and placed under the direction of those engaging in it out of pure benevolence. It is believed that, to the extent that private benevolence is interested, the work will be conducted on a higher plane of disinterestedness and

society will be benefited by stimulating charitable zeal. Private benevolent agencies cannot, however, be relied upon to do the entire work, because of its vastness. It should be regarded as the imperative duty of the State to create provision itself or to secure it in institutions already established in its own or adjoining States. In every State it may not be practicable to establish epileptic colonies, but there is no reason why it should not be made mandatory by every State, as it is in Prussia, to provide in some way proper asylum care for its epileptics.

Selecting a Site.—In looking for a site, it should be announced that gifts of land will not be considered; that the State is not a suppliant for the bounty of this or that locality specially favored by a financial backing or by political influence; that it wishes to pay for value received; and that, in the interests of the entire State, it is intended to select the best site in the State. When this plan has not been adhered to and the State has accepted gifts of sites, numerous embarrassments, pecuniary and otherwise, have subsequently arisen, to the disadvantage of the State.

Among primary considerations are those of healthfulness, especially freedom from malarial influences, a bountiful water-supply, and facilities for disposing of sewage. The water should be subjected to a chemical analysis. The centre of epileptic population should be considered, although this is a matter of minor importance as compared with some other considerations. A situation in close proximity to a town or large village is objectionable. At the same time it should not be so remote as to preclude those connected with the institution from the enjoyments of social life and the intellectual culture a town affords.

The question of climate should not be overlooked. In the same State there may be a month's difference in the

length of the mild season, permitting much more outdoor life and outdoor employment in some sections, which counts a good deal on the score of health, and is a matter of economy in the employment of labor, in the maintenance of farm stock during the winter, and in the consumption of fuel.

It is of the utmost importance to secure a liberal acreage of land. In founding similar institutions the State has sometimes been put to a great disadvantage, and later has found it impracticable to obtain at any price a sufficient quantity of land, which it could readily have secured at the outset at a moderate cost. After the State has begun to make improvements a speculative value affects surrounding property. No hard-and-fast rule can be laid down for the amount of land required for an epileptic colony, which should be largely agricultural; but for the smallest enterprise of this kind it is advisable to have at least five hundred acres. If it is thought that the institution will eventually provide for one thousand inmates, from fifteen hundred to two thousand acres will not be found too much. An instance is not on record of a State having suffered loss by making a large investment in land in purchasing a site for a State institution. A large acreage of land is desirable, not only for the opportunity afforded for giving patients outdoor work, but in order to reduce the cost of maintenance by producing supplies, including meat, milk, and eggs, as well as vegetables. However large the estate, any seeming surplus of land can be used for pasturage and fattening stock.

Particular attention should be given to the character of the soil, which should be productive, easily cultivated, and a goodly portion of it specially adapted to gardening and fruit-growing. Warm, loamy earth is pleasant to cultivate,

but the tillage of stiff, lumpy clay, or stony land, is regarded with dislike by the farmer or gardener. A tract of land gently rolling, with a general inclination to the east and south, is better than a bleak northern exposure.

Convenient proximity to a railway station is desirable, but it is not well to have a railway line pass through the grounds. It is better to be within a reasonable distance of a passenger station and provide means for obtaining heavy supplies by constructing a switch to the main track. Accidents and loss of life sometimes occur from patients falling upon the railway track while in a fit.

Organization.—In organizing boards of management it is thought that the various sections of the State or of the district for which the institution provides should be represented. This is only fair to the citizens of all sections and is but just to the epileptics residing in different sections. This implies a greater sacrifice of time on the part of the managers, but there are always capable persons to be found who will assume the responsibility, and often the greater the sacrifice to be made the more earnest and disinterested are those who take the office. When managers, or a majority of them, are appointed from the locality in which the institution is situated, questions involving local interests come up which are at variance with the interests of the taxpayers of the whole State, and cause embarrassment. It is assumed that, in the management of the colony, the superintendent is vested with large executive power; that he is, in fact, the executive officer of the board for all practical purposes. Under such circumstances it will be found best to instruct this officer to carry out the wishes of the board rather than delegate the power to special or standing committees.

The utmost care should be taken to secure a competent

superintendent. Having done this, and the general and particular policy having been defined, and the rules and regulations of the board having been laid down, it is but just to leave the superintendent free to carry them out. If he will not or cannot do so on account of incapacity or for other cause, then a new superintendent should be appointed. When this course is pursued there is not the same necessity for the members of a board of managers to reside in close proximity to the colony. At first thought it would seem that the best results would come from the appointment of a board all the members of which reside in near proximity to the institution, but experience does not warrant this conclusion. On the contrary, serious difficulties are known to have arisen in this way, and the interests of the State have suffered in consequence.

On every board of managers of a State or private institution for epileptics women should be represented. The reasons for such representation are obvious. Numerous unhappy instances are on record where female delicacy on the part of teachers, nurses, attendants, and servants in charitable institutions has stood in the way of facts being revealed to men responsible for the management of the institution, which it was necessary they should know for the protection and welfare of the inmates. The superior knowledge possessed by women in matters pertaining to good housekeeping, comfortable personal care, domestic economy, and the peculiar wants of their sex, should be availed of to perfect the administration and lighten the pecuniary burden of the State. In the care of children and young persons, to deprive them of counsel based on a mother's experience, and devotion which comes from a motherly instinct, is unjustifiable. To deprive women suffering from bodily or mental disease from the benefits resulting from the representation

of their sex on the board of management, is an unwarranted assumption of masculine power.

Some of the reasons favoring the representation of women on boards of management apply with equal force to the appointment of a woman physician on the medical staff of an institution where there are women or children. All women, however, do not want a female physician to serve them, and they should not be restricted to such; but it would seem self-evident that a properly qualified female physician on the medical staff of an institution for epileptics is indispensable.

Opening a Colony.—It has been found disadvantageous to open a colony for epileptics with a large number of patients. It is better to receive a few at first and increase the number gradually. In this way the patients are more easily adjusted and reconciled to their new life, and much friction is avoided. This course, it must be conceded, increases for the first year or two the per capita cost, but the advantage resulting is more than compensatory. Neither is it well to admit patients promiscuously. It is better to discriminate between those whom there is a reasonable prospect of curing or improving and those who have already sunk to a low condition. It is best to select first the most hopeful cases from the poorhouses and those supported by outdoor relief.

Improvement of Grounds.—After a site has been purchased time should be taken by the board of managers, aided by competent experts, to make a careful examination of the property, and a plan should be perfected before any improvements are begun. Deliberation at the outset may save disappointment and embarrassment afterwards. In selecting sites for the buildings the elevation and grade of the land should be considered, in order to secure situations in harmony with the natural outline of the landscape, and

avoid unnecessary and expensive grading and terracing. Many a fine site for a building has been spoiled in the attempt to improve by grading what nature had left in graceful outline and easy inclination. The beauties of the immediate and surrounding landscape should be kept in mind, and the property should be developed so as to afford the greatest possible enjoyment to the inmates of the institution from the contemplation of the attractions of nature. Developments on this line need not interfere with practical and economical aims. The preservation of whatever of natural beauty there is about the estate should be a primary consideration, as its development, especially in the growth of trees, is a work of years. One familiar with the delightful surroundings of some of the English institutions, as also many of the judiciously improved country places both in England and America, can realize the happy effect that may be attained by the application of artistic rules in improving a large landed property. One of these cannot be too strongly emphasized,—“Remove objects near to you while there remains something more pleasing beyond, and plant to hide that which is offensive to the eye, either in a near or distant prospect.” Fences showing limitations of space should be dispensed with or kept out of sight as much as possible by judicious planting of shrubbery, and, when practicable, by taking advantage of depressions in the grades of the land.

In planting and improving grounds, a view into a park or a glimpse of a pleasing prospect should not be obstructed. The arrangement of the buildings should be such as to command these outlooks. Should the property include a sheet of water, even though small, it may be made an attractive feature of a park; and, with patriarchal trees around its border, it may be a source of never-failing pleasure. Under

any plan, cottages should always have as pleasing and as extended a view as practicable. The outlook from a sitting-room of a dwelling should never be against the walls of another building.

An extended expanse of green lawn with shade from large trees is preferable to numerous flower-beds requiring much culture and attention. Ornamental shrubs at curves in the roads and walks may be disposed so as not to interfere with landscape views, and at the same time serve as reasons for making a graceful curve. To make a bend in a road or walk without any apparent purpose is highly artificial.

In building up a colony the opportunity is presented for making improvements on æsthetic lines that are not possible in a village community, for the reason that a high ideal adopted by one resident is neutralized by his neighbor's lack of good taste and utter disregard of artistic rules. On the other hand, the development of the broad estate of a colony may proceed under one direction so as to attain a harmonious whole, affording great enjoyment to every beholder, although not every one may be conscious of the reason for it. In almost every human being the love of nature is instinctive, and it should be regarded in the light of an obligation to afford the greatest possible happiness from this source to those who are restricted to institutional life.

The exercise of æsthetic taste as thus suggested in the grounds devoted to ornamental improvements and for living purposes need not interfere with plans of a more practical nature for the agricultural and industrial departments. The gardens, as also the fields, should be laid out so as to be convenient to cultivate and for gathering the crops. The laying out of serpentine drives, cutting the fields and gardens into irregular-shaped tracts, awkward to plough and cultivate, should not be permitted.

One of the first things that may be undertaken to advantage after coming into possession of a colony estate is the planting of a nursery of fruit, shade, and ornamental trees and shrubbery. By means of a home nursery a profuse supply of these articles may be obtained at small cost, which will have attained a sufficient growth for transplanting by the time the grounds have been prepared to receive them.

Erection of Buildings.—While the buildings of a colony should not be absolutely plain, they should be devoid of those architectural features which are purely ornamental. Every unnecessary angle or gutter in a roof or projection is an additional item to be kept in repair as time and the elements do their work. The lines of a building may be broken so as to produce a pleasing effect and not be open to the objections named. The ambition of the architect or the enthusiasm of managers, inspired by a desire to have buildings that shall be a pride to the State and an ornament to the locality, has often led to expenditures out of all proportion to the object in view. The idea has become too common that whatever the State does must be on an expensive scale and of an imposing character. The development of a colony should be on practical business lines. The same principles of economy that govern a private enterprise should be applied here.

Another consideration should restrain us from unnecessary expenditure in the erection of buildings for the afflicted classes. The numbers comprising them are so large and their increase so rapid that the means never seem sufficient to provide the necessary accommodation for all requiring it; and a wrong is committed by providing palatial accommodations for a part of the State's beneficiaries while others are left in absolute neglect.

Uniformity in buildings should also be avoided. There

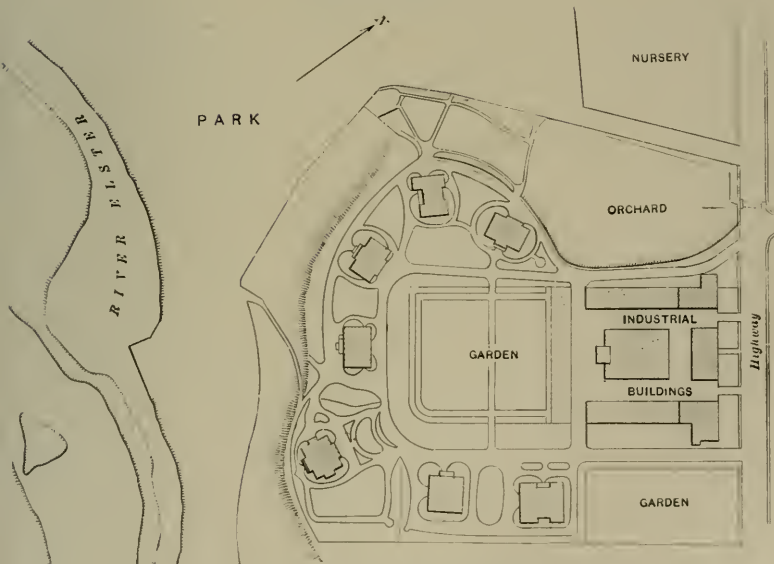
is no necessity that even two of them should be alike. By slight changes in outline they may be made to appear quite dissimilar, and less like adjuncts to a great manufacturing establishment. In cottage residences uniformity is particularly objectionable.

In the arrangement of cottage groups of dwellings they may be placed regularly or irregularly according to the grade of the land. The arrangement of the cottages for the insane at the Alt-Scherbitz Asylum in Prussia seems to me desirable. The cottages for male patients fill about two thirds of a circle facing outward upon a drive, all somewhat elevated, having pleasant outlooks into ornamental grounds. The industrial buildings are in the rear of these. The cottages for women are in the segment of a circle, elevated and overlooking the river Elster, the meadows and plantations beyond. The industrial department for women, including the laundry, is situated in the rear. The cooking is done in a general kitchen, and the food conveyed to the different cottages by a four-wheeled vehicle, so constructed as to keep the food warm in transit. This is drawn by horses. In each cottage are heaters for keeping the food warm while being served. Each cottage has a dining-room, scullery, and cupboards for dishes. In some institutions on the cottage plan there are a general kitchen and a dining-room or a dining-room for each sex, to which all the inmates resort for their meals. In some cases we find each cottage forming a separate establishment, having its kitchen and dining-room. The making of bread and the laundering, however, are usually done in separate departments for the whole colony. In some other institutions the cottages are connected by light, open covered ways, protecting the inmates from sun and rain and forming at all seasons a pleasant promenade. In other institutions a framework

WOMEN'S GROUP.



MEN'S GROUP.



METHOD OF GROUPING COTTAGES AND INDUSTRIAL BUILDINGS
AT ALT-SCHERBITZ ASYLUM.

is supported on colonnades, and the whole work is covered with vines. This, if not so practical, is certainly attractive and picturesque.

Covered ways between buildings are often regarded as purely ornamental or luxurious appendages. They may be justly regarded, however, as giving, according to their breadth and length, just so much additional space to a building. Sheltered from the rain, dew, and hot sun, they afford opportunities for the patients to take the fresh air while promenading or sitting, being of especial advantage to invalids, and relieve the space within the buildings with which they are connected. Moreover, they afford a means of convenient communication between the buildings at all hours, and by their use the floors of the buildings may be kept clean at less expense than they could be without them.

It is not desirable to erect large buildings. The larger they are the more difficult is the problem of ventilating every part and getting sunlight into their interiors. Moreover, it is a departure from the colony idea and from home-like principles. Buildings should not be over two stories in height, and they should be planned, as far as practicable, so that the upper floors may be occupied as dormitories and vacated during the day while being ventilated through open windows. All should have cellars, both for sanitary considerations and for the facility thus afforded of introducing and looking after the plumbing and heating apparatus, etc. The cellars should have hard cement floors. The per capita cost of construction is about the same for three- and four-story buildings as for those of two stories, for the reason that the higher the building the stronger must be the supporting walls and beams to bear the weight of the superstructure and the strain against the wind.

The tendency in establishing colonies for epileptics is now

towards smaller cottages with a capacity of from ten to twenty patients. Some labor under the impression that larger buildings would mean economy in administration. I think it safe to say that medical experience is opposed to this view on the ground that reasonable economy may be attained in the smaller structures with more satisfactory results in every way. The term cottage has lost its original meaning by present usage and has come to be inappropriately applied to a building that may contain one hundred or more persons. The term as here used is intended to apply to buildings for living purposes, designed to accommodate a single group numbering, say, from ten to thirty patients.

In size of buildings, design, and arrangement, everything that suggests an institution should be avoided. One may drive along the main road leading through the colony of Alt-Scherbitz and hardly be aware that he is passing a public charitable institution. Not only in the design for improvements, but in the selection of a name, the same thought should be observed. The word epileptic should be omitted, that its beneficiaries may not be continually and unnecessarily reminded of their peculiar infirmity. A name can readily be chosen indicating a community, colony, village, home, or collection of homes.

All workshops and workrooms should be well lighted. Window space costs no more than blank wall space; and as work can be performed better with an abundance of light, and as well-lighted apartments are more healthful, they should be provided. Skylights are objectionable, and the plans should be such as to afford abundant light without them.

Kitchens and laundries should be but one story in height, and should have high ceilings. They should be

constructed so as to permit the vapor, steam, and gases to pass quickly away. For obvious reasons, kitchen and laundry apartments should never be in basements.

Heretofore it has been generally considered that brick and stone were the only suitable materials to be used in the building of State institutions. The experience in the use of wooden buildings¹ in some public charitable institutions raises the question whether wood for two-story cottage dwellings may not enter more largely into their construction. In the use of brick or stone greater precautions must be taken, at increased cost, to guard against dampness. Brick absorbs a great deal of moisture, which is an element of disintegration when frozen, and is not a durable material unless it be painted and the painting from time to time renewed. Wood, if laid on dry stone foundations and kept well painted, may last for centuries.

Fires usually originate in dwellings from the inside, and a wooden building is therefore as safe as a brick one, except in a general conflagration, which would hardly occur in a colony with a good water-supply and a trained fire-corps, in addition to a subordinate trained corps in each household,

¹ At the Craig Colony there is a pleasant wooden cottage now occupied by epileptic patients that is apparently in as good condition as when it was built forty years ago. It is two stories high, with tin roof. It occupies, exclusive of a broad veranda and a small rear extension, 34 x 51 feet on the ground. The interior is so divided as to give a broad hall, a large pleasant room for two attendants, a dining-room, kitchen, pantry, scullery, water-closet, bathroom, and ample dormitory and sitting-room space for twelve patients. The building has blinds and a veranda ten feet broad extending the full length of its front. When I last saw it on a summer's day, its veranda was hung with Japanese screens, and a number of women in easy-chairs were sewing and knitting upon it, presenting a scene of homelike comfort and contentment. This building would now cost by careful estimate \$2400, including heating and plumbing. This estimate is for a substantial structure on stone foundation, with cellar, the frame sheathed within and without, having felt lining under the clapboards, and the horizontal lath laid on vertical strips of the same, allowing the mortar to clinch against the woodwork, making a solid, warm, and dry wall.

and a night-watch. With hydrants on each floor, and hose attached, it would seem that the danger from fire would be reduced to the minimum.

Two-story wooden cottages can be tastefully constructed, with pleasing exteriors and convenient interiors, at a comparatively low expenditure. I think it safe to say that dwellings of this character suitable for epileptics may be built and furnished with facilities for heating and lighting at a cost not exceeding \$200 per capita, and that these will average better in quality than the average of farmers' dwellings in prosperous sections of the country. I would not recommend the entire substitution of wood for brick, even for moderate-sized structures, but it would seem well to give wooden dwellings a trial on a limited scale.

If brick can be made on the place by the patients in sufficient quantities for building purposes, the question of cost would favor the use of brick. Not only have some of the houses at the Bethel Colony, near Bielefeld, been planned by epileptics, but the brick for them was made by epileptic patients. The carpentry, ironwork, painting, and glazing were also done by epileptic workmen. What has been found practicable at the Bethel Colony may be possible elsewhere.

It is not intended to go into details of construction, finish, or furnishing; but a few points are deemed worthy of special attention in an institution for epileptics. The corners of all woodwork, like newel-posts, baseboards, etc., should be rounded; stairways should have broad treads, easy risers, and to every flight two or more broad landings, for the purpose of preventing or lessening injury to patients who fall. Heating and ventilation should receive careful attention, and the systems adopted should be such that patients may not be liable to injury from the apparatus and fixtures

used. Ventilation may be promoted by open fires properly screened, and they add so much to the cheerfulness of apartments in gloomy weather that I cannot too strongly urge their use. Dr. Osborne very happily reflects my views respecting open fires in the following language:

“ Our open fireplaces, carefully protected by ample screen guards, keep the most perfect ventilation under the severest tests, and give at the same time such a sense of warmth and comfort to the whole building as cannot be described. A source of physical comfort by day, they are a sweet medicine to restless bodies and aching brains at night. There is a world of comfort in an open fireplace for the well, and to these patients the influence is fourfold. I recall many stormy winter nights, when the rain outside was falling in a steady downpour, or, perhaps, with a cool wind blowing, was dashing against the windows, or rattling against the roof, that I have quietly made the tour of the wards to note the sense of absolute peace and comfort that reigned supreme. In the capacious fireplaces the night-log had been carefully fixed in place, the dormitory lights turned down to a glowing speck, and the pathetic little faces would be found all turned towards the sputtering log on the hearth. Perhaps they, too, saw images in the coals. Those to whom bedtime brought a period of tossing and unrest, and those subject to wakefulness, all found in the open fire a never-failing attraction. Some would be content to lie with their faces to it, others rested on elbows, now and then one would sit up, all wrapt in mute attention, till eyelids drooped and muscles relaxed, and murmurless they sank to sleep.”

From opinions expressed by superintendents of institutions where the experiment has been tried, I conclude that unplastered walls are not satisfactory. At first thought it

would appear that there would be considerable economy in this method of construction; but, as a better quality of brick is required, and as the brick must be laid with great care, the difference in expense is overbalanced in favor of plastered walls. A hard-finish, plastered wall painted a pleasing tint, and washed and repainted as frequently as desired, does not absorb poisons and has a more homelike appearance, especially in living-rooms. The brick, unplastered walls will answer for stables and outbuildings, but they are not suitable for homes or the office and living departments of charitable institutions.

For the same reason that casings, newel-posts and railings should be rounded, furniture should have no sharp, obtruding angles. It is desirable that there should be a variety of furniture, including easy-chairs, in the sitting-rooms. Departments occupied by women and those of the better class for men should have floor rugs, and hallways should have a strip of carpet or cork linoleum laid through the centre. Sitting-rooms may be made attractive by pictures on the walls and flowering plants at the windows, which the patients may be encouraged to cultivate. All means that can make indoor life pleasant should be adopted.

Soft shades of color should be used for buildings. Such tints as will harmonize with the landscape in which the buildings are set and at the same time present a cheerful aspect are the most desirable. Sombre tints should be avoided. The attractiveness of a building depends much upon its color. White is trying to the eye, and should not be used unless it is almost entirely hidden by green foliage. A large white building standing out boldly in the landscape is not in keeping with natural objects, and offends one's æsthetic sense.

Classification.—The importance of extended classification

in institutions for epileptics is felt by all having charge of them. The distinctions are numerous. Of necessity the sexes must be separated; adults must be separated from girls and boys; the infirm cases of both sexes must be separately provided for; and if we make but two classes based on social distinctions and habits, we have reached eight classifications before making any for different mental conditions.

At the Bethel Colony, as a general rule, the patients are provided for in houses containing about twenty persons, the patients being classified, as far as may be, according to their various conditions and capabilities.

The classification of epileptics should extend to children as well as adults. In the Zurich institution Dr. Kölle has separated them into three divisions: the normally intelligent, moderately feeble-minded, and those decidedly feeble-minded. He finds in that institution that there are about 30 per cent. of the first class, about 50 per cent. of the second, and about 20 per cent. of the last named. The younger male children may be kept on the female side of the institution.

In the establishment of the Ohio Hospital for Epileptics provision was made for the admission of insane epileptics. In the founding of the Craig Colony, upon the recommendation of the State Board of Charities, insane epileptics were excluded, and provision was made for the transfer to State hospitals for the insane of epileptics becoming permanently insane at the colony. The overcrowded condition of the insane hospitals in Ohio at the time the Ohio Hospital for Epileptics was founded was doubtless the controlling factor in making that a mixed institution, as by removing the insane epileptics from the State hospitals for the insane greater accommodation for the non-epileptic insane was

secured, for which there was a pressing demand. While provision should be made in every epileptic colony for those becoming for a time mentally disturbed and excited, it seems manifest that, when epileptics have reached a condition of permanent insanity, they should be transferred to departments of hospitals for the insane specially provided for them. At Bethel, as in some other European institutions, cases of actual insanity are sent to insane asylums. A colony for epileptics is deprived of the homelike character an institution of this kind should have by making permanent provision therein for any considerable number of insane persons, whose presence must exercise a depressing influence over those susceptible of improvement. A desirable classification of epileptics cannot be effected so satisfactorily in small institutions as in those on the colony plan accommodating at least from 300 to 400 patients.

Hospital and Infirmary Accommodation.—The numerous buildings of a colony should include a hospital for those suffering from acute diseases and accidents, and ample infirmary provision for enfeebled and bedridden patients. Buildings for hospital purposes should be constructed in accordance with modern scientific principles.

Provision for Patients Temporarily Irresponsible.—For temporarily irresponsible and excited patients a separate building should be provided, so remote from other cottages that the inmates will not disturb other patients of the colony. The progress of mental disturbance and excitement lasting from twenty-four hours to a week is regarded by eminent physicians as a condition that other patients should not witness.

Assembly-Room, etc.—There should also be provided an assembly-room for amusements and entertainments, and a gymnasium with billiard-room for indoor recreation.

Administration Building.—What is termed the administration building is usually an imposing and unnecessarily expensive structure, in which are the superintendent's residence, offices for himself and resident physicians and steward, and living-rooms for at least a portion of the staff and nurses. For a colony, the administration building should be a plain, inexpensive structure, not more than two stories in height, and it should be strictly a service building, containing only business offices. The officers with families should live in separate homes and dwellings, as in ordinary life. This plan has proved satisfactory, and it saves large expense, and does not give an institutional character to the place.

Accommodations for Officers and Employees.—In providing accommodations for officers, especially for nurses, it is desirable that their quarters should be made attractive within and without, and reasonable provision be made in the way of real comforts. Their apartments should be so withdrawn from the scene of their labors while on duty as to make the respite from their mental and physical strain a season of rest and recuperation.

There should be a separate two-story building with its sitting-room, dining-room, library, kitchen, and dormitories for the accommodation of certain officers not having families. The superintendent, steward, and farmer, if having families, should be provided with separate residences. The houses for subordinate officers and employees should be of reasonable size, to insure comfort and convenience and make them desirable homes.

Laboratory and Morgue.—So much attention is now devoted by medical men to the scientific study of epilepsy that it seems unnecessary to urge the importance of providing the best possible facilities for prosecuting researches in

this direction. The researches made along correlated lines at the Craig Colony and at the Ohio Hospital for Epileptics, with their well-equipped laboratories, show that great advances have been made by these means, and lead to the expectation of still more important results. Moreover, these departments give to the institution the dignity of a scientific purpose.

In the location of the morgue and laboratory building, which should include a chapel or suitable room for religious mortuary services, a secluded spot should be chosen and the building screened from observation by planting. It should be accessible by private road to friends or relatives desiring to remove the remains of deceased patients. A building known to be used for purposes of dissection, standing prominently on the grounds, cannot but have a depressing influence upon patients who are naturally moody and melancholy and many of whom regard the process of dissection with horror. Everything that can depress the minds of patients or suggest unpleasant thoughts should be avoided.

Protection against Fire.—There should be hydrants upon every floor, with hose always attached, and other usual means for extinguishing fires, including portable extinguishers. Patients should be trained systematically as to what to do and how to leave a building in case of an alarm of fire. Such training gives them self-possession and prevents a panic if a fire occurs. Fire-escapes should be provided for all dormitories on the second floor. The importance of having strict night supervision over all the buildings and premises should not be overlooked.

Water-Supply.—Assuming that a bountiful supply of water is obtainable, not only for the present but for the future growth of the institution, a liberal expenditure is warranted to secure the best means of making it available.

The system adopted should be such as to afford a copious supply at all times and for all purposes. If two systems are adopted—one for supplying water for drinking and for culinary uses, and the other for all other purposes—it will be found that, if a tower or upright cylinder is used, an upright cylinder of much less capacity may be placed within the larger cylinder with economy, and this arrangement will result in some other advantages.

Disposal of Waste.—The disposal of sewage in a colony where there are numerous buildings and many of them widely separated is a matter of great moment, and more difficult of solution than where a great building on the congregate plan may be accommodated by one large trunk sewer conveying the asylum waste to a large and rapid-flowing river or to a filter-bed. The success of intermittent filtration-beds depends largely upon the nature of the soil where they are located and conditions as to grade. It is therefore important that these should be well considered before an outlay is made, otherwise the results may not be satisfactory. The system of disposing of the fæces by dissolution in water, thus greatly increasing the volume of fetid matter, the solids of which must afterwards be separated from the liquid, is an expensive and troublesome one to maintain. Scientific investigations and experiments now making, may develop some process of cremation that will be practicable and desirable for the disposal of sewage of isolated dwellings.

The use of dry earth in the absorption of waste about stables, piggeries, closets, and elsewhere is advantageous in purifying unwholesome quarters and in the production of fertilizing material. While the dry earth may be readily obtained during the summer, it is necessary to store away a sufficient quantity for use during the winter months and the

rainy seasons. The earth should be dried in vats with covers made to shift on rollers, the same as are used in the salt-fields in manufacturing salt by solar evaporation. After thoroughly drying the earth, it should be shovelled into adjoining sheds having floors, underneath which is a free circulation of air. In this way a natural deodorizer and disinfectant may be provided for all seasons, the utility of which is recognized by the brute creation as well as by man.

Electric System.—Convenience and economy will be found in lighting buildings by electricity. The electric system may also furnish motive power in the shops and elsewhere. Under some circumstances, in a colony covering a large area, it is thought that electric tramways are advantageous in transporting persons, farm products, and various kinds of material from point to point, tending to centralize the administration. With the same object telephonic communication should be had with different departments.

Farmstead.—The farmstead, or agricultural buildings, of the colony is important, and should form a separate department. The barns and stables should be capacious. The former should have basements, ample floor space above, and two main doors on the same side of the building, permitting of the driving in by one and out by the other. The posts should be high, and the roof hipped, to afford liberal space for the storage of grain and fodder. A cellar for roots should be accessible from the basement, and if ensilage is used, a silo also. From both of these a tramway or trolley should deliver food to the stalls.

An advantageous arrangement for a farm group has been found in locating the barn—which is at the best a formal-looking structure—a goodly distance in the rear of the farmer's residence, on each side of which might be placed a cottage for patients working upon the farm. On either

side of the space between the farmer's residence and the barn might be erected a range of stables, sheds, repair shops, and other buildings belonging to the farm establishment. Thus would be formed a large court back of the farmer's residence. From the back porch of his house the farmer could command a full view of all the buildings and the operations about them. The buildings should be plain and the barns so constructed that interior beams will not obstruct the free unloading of fodder by means of ridge carriers. The farmstead group should be screened by the judicious planting of large-growing shade trees.

Food.—The matter of food is of great importance. Experiments are now making in dietary tables, and the kinds of food best suited to the peculiar phases of the disease and the condition of the patient are now carefully studied in different institutions. The results should be constantly watched and such changes made from time to time as will best promote the welfare of the patients. The gardens and orchards of the institution should be developed to meet the full needs of the inmates in variety, quality, and quantity of fruits and vegetables.

Much depends upon the preparation of the food in making it palatable and wholesome. None but an expert cook should be employed, and the kitchen, as well as the laboratory, should receive a share of the medical officer's attention. If the food is properly prepared and made acceptable, economy will result.

Not only should the food be well cooked, but it should be properly served, and sufficient time should be taken to do this. An appearance of "mussiness" should be avoided. To serve a meal hastily and heedlessly, as brute animals are sometimes fed, often disgusts the patient and destroys his appetite. Many patients have been accustomed to decor-

ous ways of living, and they are much disturbed by the non-observance of rules of home-life etiquette, which are absent in some large institutions. Moreover, attention given to these details has a refining influence upon all. Food should not be put upon the table until the patients are seated, and then it should be placed there in an orderly and becoming manner, warm dishes being brought in fresh from the range. The method pursued in the Ohio institution of serving the meals in courses commends itself to general adoption. Dining-rooms should be well-lighted, cheerful apartments and have pleasant lawn outlooks. Flowers in their season should decorate the tables, and the feet of chairs should be protected with rubber tips, to prevent the nerve-tearing screech made by their movement upon a bare floor.

Education.—Epileptic children should be educated according to their capabilities. In doing this, close discrimination must be made of individual capacities and great care taken that no child is coerced beyond his continually varying receptive ability. The bent of the pupil's mind should be studied and his development followed along the line of inclination.

Of the necessity of educating epileptics, Dr. Spratling, of the Craig Colony, says: "When it is realized that one person in every five hundred of the population is an epileptic, and when we further realize the more important fact that 75 per cent. of all cases of epilepsy begin under twenty years of age, . . . and that, unless special pains be taken to correct the tendencies of the disease in early life, progressive mental and physical failure is sure to follow—we can appreciate the great value of the proper education of this class, especially when it carries with it the potent influences that serve so materially to stay the ravages of the disease. Not only, therefore, do we educate, but through

the same agencies we ameliorate and cure. For no other class of dependents is it possible to do these two things at the same time."

Secretary Gaskell says that the worst cases at Chalfont St. Peter are those that have been epileptic from childhood. That this is so he attributes in most instances to a lack of education.

Dr. Powell says: "Education, in its broadest sense, is the chief hope of the epileptic, as it is with the normal child, only modified to suit the strength of the patient."

Dr. Kölle, whose long experience in the care of epileptics enables him to speak with authority respecting their requirements, says: "Epileptic children ought to be, and must be, educated. What is to become of them otherwise when they are sixteen, eighteen, or even thirty or forty years old, especially if the disease decreases? It may be asserted that every epileptic, however seriously affected, will, when not under the influence of attacks, demonstrate in himself the results of careful or neglected training. A badly trained epileptic is a heavy, almost unbearable, burden to those who care for him, either in an institution or in the family."

The progress of which epileptic children are capable is forcibly illustrated by Dr. Kölle by comparison with children of brilliant intellect, those of ordinary capacity, and the feeble-minded. He says: "The teaching of specially gifted individuals may be compared to making the voyage of life in a splendidly equipped ocean steamer. The ordinary human being travels in an ordinary vessel, it may be sometimes under steam and sometimes under sail. The idiot moves forward slowly; his ship is a heavily laden freighter, which, however, in the course of time reaches a certain destination. The epileptic pupil travels, in proportion to his mental gifts, either by fast steamer, by an ordinary

ship, or in a heavy freighter; but every attack of his malady is like a tremendous ocean wave, which not infrequently sweeps overboard all the stores of the vessel. When teacher and pupil think they have about reached some harbor the ship is tossed back from the landing to the sea, and it may go down altogether; the epileptic succumbs to his attacks and the teacher feels inclined to let go the rudder and ask, Wherefore all the hard work and trouble ? ”

It is the testimony of those having experience in the care of epileptic children that home training is not adapted to their needs. Dr. Kölle has given an apt illustration of the advantages of institution over home training for epileptics. He says:

“ It has ever been an especially difficult task to train sick children properly. In the family circle it is often impossible to accomplish this end in the case of epileptics. A clear understanding of the physical condition of the child is, above all, necessary; and how many parents, however well educated, can fulfil this requirement ? It might prove no more advantageous for the child if the direction of his training were given over to the family doctor, either in whole or in part. The troubled parents indulge the little patient in many ways, for the rule given them for guidance is, ‘ On no account, any excitement.’ Yet epileptics, more than all others, should be strictly brought up. The so-called epileptic character, with all its repulsive sides, must be combated by carefully planned methods of training from earliest childhood. Experience teaches that this is possible. There are very attractive, even charming, characters among epileptics when the disease has not wrought too great ravages of mind and soul; and there are, on the other hand, epileptics with a milder form of disease who are unbearable, who are disinclined to any work, who are moody, obstinate, sus-

picious, and selfish ; in fact, classical types of egoism. The causes which have operated to produce such a character are easily comprehended. Each attack makes the patient wish to find means to prevent the next ; makes him introspective and desirous of managing himself in his own way. . . .

“ It is easy to see that an institution has various means of training at its command to facilitate the work of education. In it the child becomes accustomed to regularity from morning to evening, without effort. Arising, dressing, washing, eating, going to school, working, playing, all have their appointed time of day. A child who was disobedient at home obeys the command of the institution bell, and learns to carry out the daily programme without dispute. The association with other epileptics can in no way be deemed disadvantageous. It may happen that a specially sharp cry coming from one patient overcome by an attack may so frighten another as to cause a convulsion to occur in his case as well, but such a point is insignificant in comparison with the drawbacks entailed upon an epileptic by home life. It sometimes has a good educational effect for an epileptic to see attacks in others. The first impression is necessarily very depressing, but he comes to the healthful comprehension of how much those who care for him have to bear in his own case. Modesty and gratitude are thereby aroused in him instead of the traits which form the epileptic character. In some forms of this disease he is incited thereby to combat and suppress certain kinds of attacks.

. . . It is a pretty outgrowth of the community life of epileptic children that, as soon as one is overcome by an attack, the others hasten to his aid and lay him tenderly on a mattress. If we remember how epileptic children outside of an institution are avoided by others in the schoolroom or at play, and think of the happy times which such children

have together in institutions, we come to believe in the saying, 'No one is happy save in the company of his own kind.' As soon as an institution has acquired the suitable tone for its sick children and the proper atmosphere is felt within its doors, the casual visitor will, with few exceptions, see happy faces and often hear merry songs."

Among epileptic children capable of receiving instruction will be found almost every grade of mental receptivity, from the very feeble intellect to that but slightly, and perhaps not at all, impaired by disease. Moreover, it is a peculiarity of epilepsy to cause irritability, to deprive its subject of self-control and the ability to concentrate the powers of attention upon a definite purpose. Such various conditions render classification necessary and make the task of the teacher a difficult one, who must ever keep clearly in mind, not only the intellectual and moral development of his pupils, but the curing of disease. Other difficulties also must be met,—the varying condition of individual pupils, the irregularity of attendance on account of seizures, and interruption from attacks in the class-room. For the latter a mattress upon which to place the pupil should always be in readiness in an adjoining room, and the teacher must, of course, know how to care for the unfortunate one. If signs of an attack are visible the pupil should be excused from class and every effort made to tide him over the dangerous period. He should never be forced, but carefully and skillfully guided only so far as is consistent with his mental and physical ability.

In the education and training of epileptic children the development of the higher intellectual faculties is considered of less importance than the inculcation of such knowledge as will be of practical advantage to them. Manual training, for the purpose of teaching young persons useful trades

with a view to their self-support, has come to be regarded as essential in a properly organized institution. As stated by Dr. Spratling, the primary aim in every colony for epileptics should be to cure the patient if possible. At the same time an effort should be made to educate and train him to useful and self-sustaining labor. "The means employed in the colony system to cure, to educate intellectually, morally, and industrially, and to teach self-support are so intimately interwoven that they must be considered as one, and all at the same time. When they enter the colony the patients' education should be begun along two lines, one to give them a common-school education; the other to put a means in their possession whereby they can become producers as well as consumers, and at the same time become themselves the effective agent in the application of a remedy of untold value in the treatment of their disease."

Employment.—Nothing tends to build up the epileptic so rapidly as congenial, healthy employment, especially that out-of-doors, where the sunshine, fresh air, and surroundings of nature draw his mind from himself and his disease and inspire within him mental activity and hopefulness in the place of despondency and gloom. Among the various kinds of employment in which it has been found practicable to engage epileptic patients may be mentioned as first in importance that afforded by agricultural and horticultural pursuits. The benefits derived from the cultivation of fruits and garden products cannot be overestimated. Besides the immediate physical benefit to be derived in recuperating or building up the general health of the epileptic, the labor involved in such occupations furnishes an abundance and a variety of those kinds of food most desirable in the treatment of his disease. The care of stock and

the dairy affords much to be desired in the way of health-giving labor. If the property of the institution includes a bed of good clay, brickmaking is an industry that should receive early attention, and the cost of buildings may be lessened by using brick made by the patients, aided by skilled assistants and brickmaking machinery. If there is a good stone quarry on the place it should be early developed for the same reason. Carpentering, blacksmithing, the making of tinware, painting, tailoring, basket-making, cabinet-work, upholstering, broom-making, brush-making, printing, and bookbinding are indoor occupations that have also been followed with advantage.

For women, light garden work, the care and cultivation of fruits and flowers, nearly every kind of domestic work, including washing, making and mending wearing apparel, knitting, and fancy needlework, may be mentioned. At Bielefeld some thirty different callings are followed by the men and women patients.

Attendants having patients in charge should not be permitted to act the part of an idle dictator, but should work with the patients, taking the lead in whatever they are doing, and should show by their example that no harder conditions are imposed upon patients than upon those having charge of them. This course dignifies their labor and causes the patients to work more contentedly than they would otherwise. Moreover, it resembles the farm system, where the farmer works with the hired workers, usually taking the lead in their daily tasks. In many of the Scotch asylums for the insane I have observed that the attendant took the lead in both indoor and outdoor work, and that he was expected to do, and did, more and harder work than the insane patients working with him. It has been found disadvantageous to allow epileptic workmen to supervise

other epileptics. The epileptic patient at the time of his admission should be made to understand that he is expected to work to the extent of his ability, not with a view to creating a revenue for the institution, but for therapeutic reasons.

Compensating Patients.—I found in France some years ago, and I assume that the policy has not been set aside, that the Government encouraged the managers of asylums for the insane to compensate working patients in a moderate degree for their labor. I was told that the plan worked beneficially and without embarrassment where it had been tried. It would seem that such a custom might be adopted with advantage in colonies for epileptics, and that a small compensation might be allowed patients for labor faithfully performed. The earnings might be set apart and disbursed by the management in accordance with the wishes of the patient. To justify a limited remuneration, it should be explained to the patient that the expense of his board and medical treatment is borne by the institution and must be considered in making returns for his labor. However small the amount given, it has been found in the case of the chronic insane that their earnings afforded contentment and satisfied a sense of justice, especially as between those who did a great deal of work and those who did little or none. Contentment of mind is one of the most hopeful conditions of epilepsy, and a recognition of services rendered, however slight, it is believed will largely tend to foster this feeling. At Bielefeld, some patients, the poor ones especially, receive compensation for their services in the form of "pocket money," which is often used to aid their poor relatives. There all must work, not because it is of advantage to the colony, but for the benefit to themselves. Private patients paying as high as \$500 a year and

having special accommodations are not exempt from this salutary and inexorable rule.

Training Nurses and Attendants.—There should be in every colony for epileptics a school or an organized system for training nurses and attendants. It is important that instruction should be given in the principles of rendering first aid to the injured, in consequence of accidents from seizures to which epileptics are subject. Supplementing the natural qualifications of good health, good sense, gentleness, patience, and forbearance necessary to the efficient nurse, there must needs be oft-repeated lessons having in view the inculcation of correct and orderly habits, the observance of a respectful demeanor, of strict propriety in all matters, including cleanliness of person and dress, the exercise of watchfulness, self-control, kindness, and cheerfulness in the discharge of every duty, and the furtherance by all practical means of the comfort, happiness, and recovery of the patients. The paternal or maternal instinct is considered by Dr. Osborne a quality of prime importance to those having the care of afflicted human beings. He says:

“ Without the maternal or paternal instinct there cannot be that patience which gives wisdom in the correction of errors and the guidance therefrom, faith in the repetition of moral precepts, power in the inculcation of lessons, judgment in the selection of topical training, calm endurance of daily trials with the incorrigible and mischievous, fortitude to resist the influences of discouraging phases of the occupation, and, lastly, resignation to bear meekly yet courageously the burden lifted from parents and relatives, that the child may be brought to some consciousness, however little, of its relation to its associates and its God. Without this instinct there cannot exist that forbearance so essential to the success of the ideal officer; that forbearance that leads

the officer to withhold from fretful complainings, to abstain from violent expressions of temper, to avoid arousing the antagonism of the child, whereby its obedience and dependence may be imperilled, and, finally, to forego all exhibitions and expressions of personal weakness and self-distrust in one's ability to master quickly and satisfactorily the peculiar emergencies that constantly arise."

The attendance upon lectures by those under instruction, besides rendering their services more efficient, tends to awaken in their minds an interest in scientific subjects. They become more observant, take greater pride in their profession, have a livelier consciousness of its responsibilities, and come to feel a stronger benevolent interest in their charges. Moreover, under the training system, a commendable rivalry may be established, giving better opportunities for the management to discriminate between the capable and the incapable.

The system should also include the art of cookery, and, in fact, whatever relates to good housekeeping.

The physician and the educated nurse are mutually helpful. The latter, from a closer association with the patient, can describe to the physician traits of character and symptoms of disease of which he might not otherwise have knowledge, thus enabling him to give more definite and correct instructions for the guidance of the nurse.

Dr. Delia E. Howe, of Fort Wayne, Ind., speaking from experience, says upon this subject: "The most important of all training for attendants, as well as nurses, is that which develops in them a love for neatness, order, daintiness, refinement, gentleness, and sweetness of disposition. Pupils of such a school should be made to understand from the first that their success will depend on what they themselves are, or are able to become; and that lectures on table

manners, if such are defective, are as much a part of their education as lectures on epilepsy. In short, they must enter the school as pupils, ready to be taught anything in which their teacher recognizes a deficiency, from the care of their own health to the ethical training of their charges. . . .

“ Attendants who are not courteous to one another and to the children can never teach courtesy to the latter, and the great aim of our work with these children is to bring them into more nearly normal relations with those about them—to diminish in their minds the relative importance of ‘ ego,’ by increasing the attention they pay to the people and things about them. I believe this can in no way be better accomplished than by teaching them to observe at all times little ceremonies of politeness; always, of course, impressing upon them that such ceremonies are but translations of the heart’s loving-kindness.

“ The attendant who roughly orders a child to ‘ get up,’ and helps himself to the latter’s seat; who treads accidentally on a child’s toe and fails to beg his pardon; who forgets to say good-night affectionately and good-morning cheerfully, is failing in the most important part of her duty as an educator, even though she be ever so scrupulous in demanding from the child the strictest obedience and constant consideration of her own personal dignity.”

Religious Worship.—Provision should be made for the proper observance of religious worship, and in the opportunities offered the preferences of the patients, as far as practicable, should be considered. The mind of the adult epileptic naturally turns to the serious side of life and to the contemplation of his spiritual needs. Many of this afflicted class have strong convictions of religious duty, and find in their devotions unspeakable consolation. In some institu-

tions religious exercises are held daily, and no meals are partaken of without invoking a blessing. The epileptic is easily enraged and quick to retaliate, but under the sympathetic influences of the Christian religion he is more tractable and more disposed to exercise self-control. One having experience in the care of epileptics says: "It is a well-known fact that epileptics suffer the keenest mental anguish and sound all the depths of despondency even to despair. Spiritual treatment, therefore, in conjunction with the proper medical attention, is a factor of no small moment in the management of these poor children of misfortune. They are susceptible to its benign influence; and it is the aim of the spiritual adviser to enkindle in their souls the love of God and His Holy Word, and by cheerful, kind, and congenial association and the gentle guidance of Christian love to remove from their hearts the pall of gloom their malady has cast over them. Such influence must be exerted with the utmost care and tact in order to gain the confidence of the patients."

Cost of Maintenance.—In view of the expensive medical staff, the large force of salaried nurses, and other officials and paid employees under a high system of care in a colony designed eventually to accommodate a large number of patients, it is expecting too much to look for a very low rate of maintenance at the outset. This can only be attained after the colony or institution has reached its maximum number. It has been asserted in some quarters that these colonies can be made nearly or quite self-supporting. The truthfulness of this assertion has yet to be demonstrated. There is no doubt but that, with a large tract of fertile land, a good industrial system, and prudent management, they may attain quite a low rate of support as compared with some other kinds of charitable institutions.

The cost of support is, however, a minor consideration. We should first turn our attention to ameliorating the condition of this long-neglected and suffering class. It is not so much a question of cost of support as it is one of duty on the part of the State to lessen human suffering and to arrest the progress and minimize the causes of the disease.

Association for the Study of Epilepsy.—The necessity for some organization or society having for its special aim the study of epilepsy and the care and treatment of epileptics has long been felt in America, and doubtless greater progress would have been made in benefiting epileptics if such a society had been established years ago. The success of those organizations having for their object the study of insanity and the care of the insane and of the physically defective and other suffering classes encourages the belief that scientific study and philanthropic effort directed to the needs of the epileptic may prove of great benefit to him. A movement with this aim in view, under the leadership of Dr. Spratling, was put forward last year, resulting in the formation of "The National Association for the Study of Epilepsy and the Care and Treatment of Epileptics," the objects of which are as follows:

1. The scientific study of epilepsy.
2. The rational treatment of the disease.
3. The best methods of caring for dependent epileptics, including
 - a. The construction of proper homes based upon a study of the epileptic's needs as to classification and environment.
 - b. The study of the utilization of the epileptic's labor, for economic, scientific, and ethical reasons.

- c. The study of the best educational methods to be employed, including manual, industrial, intellectual, and moral forms and forces.

Respecting the work, Dr. Van Gieson says:

"In the practical side of the problem, much remains to be done toward the material welfare of these patients, and a dissemination of the success and importance of colonization of the epileptics.

"As for the scientific side of the problem, notwithstanding the brilliant and comprehensive exposition of the cause of epilepsy by Hughlings Jackson, the solution of the question is still unsatisfactory and lacking in proof. From objective study, the whole question of epilepsy needs working out along radically new lines of research which the modern advances in psychology and in the anatomy and physiology of the nervous system enable us to undertake."

Dr. Peterson has expressed the following opinion in relation to the formation of such an association:

"I believe that such a society would be useful, not only in calling attention to the needs of this much-neglected class of dependents, but in aiding in the foundation of special institutions on uniform lines in all the States of the Union. I think the purposes of the society should include such subjects as therapeutics and pathology, also pedagogy, sociology, etc., as far as they relate to the care of the epileptic. The membership should therefore comprise, not only physicians, but also every layman interested in special provisions for epileptics and their proper care and treatment."

Hon. Wm. R. Stewart, President of the New York State Board of Charities; Dr. Wm. N. Bullard, President of the Massachusetts Hospital for Epileptics; Dr. H. C. Rut-

ter, Manager of the Ohio Hospital for Epileptics, and many others, look for good results from such an organization. Dr. Rutter says:

“Such an association will, in my opinion, add greatly to the interest in the study of epilepsy, and also assist in providing State care in those States which, at present, have made no provision for this class of invalids.”

Awakening Interest.—In the light dawning upon this special field of charitable effort it is gratifying to note the great awakening that has taken place during late years, both in Europe and America, to the crying needs of epileptics. The efforts now being put forth, as recorded in the following pages, by eminent men and women, at large sacrifice of time and means, are deserving of earnest sympathy and hearty co-operation. The advance that has been made in the care and treatment of epileptics and the acquisition of scientific knowledge respecting the disease of epilepsy lead us to hope that the time is not far distant when all of this now much-neglected class will be properly provided for, their sufferings alleviated, and the opportunity given them of sharing in the common enjoyments of life, and that great numbers will be permanently cured.

CHAPTER II.

OHIO.¹

THE first official expression in favor of special institutions for epileptics in this country was made by the Ohio State Board of Charities. In 1868, in its Second Annual Report, the Board called the attention of the Legislature to the unhappy condition of epileptics in the poorhouses of the State, and recommended that some better provision should be made for them. In its Annual Report to the Legislature in 1869 the views of the Board assumed a more tangible shape, and special separate provision was recommended in the following language:

“ An asylum, consisting of a farm, ample in size and productive in character, upon which plain, neat, and substantial pavilions might be erected, under the general direction of an accomplished agriculturist of good administrative ability, aided by efficient medical skill and competent foremen and attendants, would fully meet the demand. With such provision, the curable might be restored, the labor of others, physically strong, properly developed, and the general comfort of all others promoted. Taking the class as a whole, the number competent to an ordinary day's labor constitutes a decided majority. This labor (itself a benefit to the individual), under proper direction, might become

¹ In the arrangement of the American States those in which there are institutions for the exclusive care of epileptics are given precedence, the States having State institutions for this class being first presented in the order of the establishment of such institutions.

not merely self-sustaining, but actually remunerative. The Board are apprised of the prevalent incredulity respecting such enterprises upon the part of the State, and yet the amount of labor thus secured, if properly directed, upon a farm ordinarily productive, could scarcely fail to meet the ordinary current expenses of such an institution."

This recommendation was renewed in the Reports of the Board for the years 1870 and 1871. In the latter year, the Legislature, possibly finding it unpleasant to be importuned with appeals for humanity from this source, abolished the Board, and it was not re-established until 1876, when it renewed its recommendation for State care of epileptics in still more earnest terms. The Secretary of the Board, Dr. Byers, referring to some pitiful cases that had come under his notice, said:

"It must be apparent that the exposure and neglect to which this unfortunate class is subjected in our infirmaries is cruel to them, while it exposes other quiet and inoffensive inmates to the danger always to be apprehended from their presence. There is an old scarred and decrepit epileptic now in our State penitentiary under sentence for life for the murder of another epileptic, who had been his fellow-lodger in the old infirmary of Lawrence County. There are now in several jails of this State persons of this class, whose violent tempers and irresponsible actions render their incarceration in close cells actually necessary. Several instances of this kind came under my observation during the year; one a case exceedingly pitiable—that of a stout colored man in the Stark County Jail, whose scalp was bared in several places, and whose face and body were fearfully bruised by falling and beating against the strong, rough iron bars of his prison-cell. He was held simply for restraint. Many of this class are kept in close confine-

ment in the filthy cells and foul air of the 'crazy-houses' of the county infirmaries, and their condition is, almost without exception, unutterably wretched. The case of a poor boy who had fallen, in an epileptic fit, into the fire, and subsequently was thrown upon the care of the Gallia County Infirmary, would, of itself, indicate the importance of some better public care for this class of sufferers. This poor boy's head and the upper portions of his body were entirely denuded, and portions of the facial muscles had been destroyed. There had been, apparently, no effort of nature toward healing, and, with sightless eyes and raw and bleeding flesh, I found him lying, as he had lain for six months, a hideous spectacle of human suffering, without the possibility of any alleviation of his condition."

In 1877, the Board again brought forward a recommendation for a State farm for epileptics, and presented an estimate of the cost of 300 acres of land, an administration building, two pavilions, eight cottages, a hospital, shops, etc., for the accommodation of 500 epileptics. The Board expressed the opinion that the plan of a State farm with such or similar buildings would meet every demand of their condition, and that the project could be carried out at a per capita cost not exceeding \$560.

The oft-repeated, patient, respectful appeals of the State Board of Charities at length met with recognition. The Legislature of 1877-78 passed a resolution authorizing the State Board of Charities to collect statistics and report their conclusions as to what public measure should be taken for the "protection, comfort, and care" of epileptics.

In pursuance of this action, printed circulars were prepared by the Board early in the year and sent out in June, 1878, for the purpose of obtaining, as nearly as practicable, reports from the several counties of the number and condi-

tion of the epileptics therein. It was found that there were of this afflicted class in

County infirmaries.....	417	} 582
State asylums.....	165	
County jails.....		64

Of the 582 in the poorhouses and asylums, 303 were males and 279 were females. Seventy-one out of 321 whose social condition was known were married; 250 were single. The Secretary said:

“The actual condition of these persons is such as no statistical tables will adequately display. Any attempt to describe in written words must fall equally short of conveying an idea of the utter and abandoned wretchedness of very many of this class now (if of quiet disposition) simply supplied with food and clothing, or (if dangerous) caged and chained in the narrow, dark, damp, and dirty cells of the ordinary infirmary, jail, or madhouse.”

During the summer of 1878, Commissioner Brinkerhoff and Secretary Byers visited New York, Pennsylvania, and New Jersey, conferring with specialists on the treatment of mental diseases, and collecting information bearing upon the resolution of the Legislature. On the 28th of October a meeting of the superintendents and trustees of insane asylums and others interested was convened at Columbus for a discussion upon the subject, at which a resolution was passed recommending the State Board of Charities to “urge the immediate establishment by the State of a separate asylum for epileptics.”

With the Report of the Board to the Legislature was submitted a paper on epilepsy by Dr. H. C. Rutter, who had personal knowledge of the needs of epileptics in Ohio; also a paper on the same subject by Dr. John Curwen, then

Superintendent of the Hospital for the Insane at Harrisburg, Pa. Dr. Rutter favored the creation of a State institution, and expressed the opinion that one could be erected, suitable in all respects for the proper classification and treatment of epileptics, for a sum not to exceed \$300 per capita.

As its conclusion concerning provision for this class, the Board recommended "that the epileptics of the State should be provided for in a colony by themselves, in cheap pavilion buildings, and with separate administration." The following reasons were given for this conclusion:

"In making this separate provision for epileptics, it should be remembered that we not only secure better treatment for them, and relieve our infirmaries and insane asylums of a grievous burden, but we also save money very largely, because,

"1. By thus aggregating them, as stated by Dr. Rutter, we can utilize their labor, and reduce the cost of attendant care so that the total expense of their keeping will be very much less, and, possibly, may be reduced fifty per cent., as claimed by him;

"2. The buildings for their accommodation will cost much less than those required for ordinary insane, and their erection would enable us to make room in our present hospitals for nearly two hundred additional insane, for whom accommodations must be provided sooner or later."

In conformity with a recommendation of the Governor in his Annual Message to the Legislature and a resolution of the House of Representatives, the State Board of Charities and members of the Legislature met in joint convention on January 21, 1879, in the hall of the House of Representatives, in order that the Board might present, more clearly than could be done in a written report, the needs of the

beneficiaries of the State. At the request of the other members of the Board, General Brinkerhoff addressed the Legislature upon this occasion. In speaking of the care of epileptics, he gave as the unanimous and emphatic opinion of the Board that they should be provided for in a colony by themselves, in cheap pavilion buildings, and with separate administration. This conference led to renewed discussion of the subject, and a bill for the establishment of a separate institution for epileptics passed one branch of the Legislature.

In the Report of the Board at the close of the year, the Secretary called attention to the deplorable condition of the 397 epileptics then in the poorhouses. "It is unnecessary," he writes, "to repeat what has been so often urged upon the consideration of our State authorities touching the horrors of this malady and its appeals for relief. There are to-day few questions involving more distress in families and suggesting greater difficulties in communities than the question of some proper method of protection and care for this unfortunate class."

In the Report of the Board for 1880, the attention of the Legislature was again called to the need of a State asylum for epileptics, and a plan of an institution for the accommodation of 585 sane and insane inmates was submitted. The plan, designed by Dr. Rutter, was somewhat similar to that of the insane asylum at Hanwell, near London.

But for a political upheaval, involving changes in most departments of the government, which some of our States occasionally experience, it is probable that some provision would have been made for epileptics during that year. The State Board, however, with unflagging zeal, repeated its recommendation for an asylum for epileptics. In its Reports for 1882, 1883, 1887, and 1889, the Board returned to

the question of care for epileptics, urging special provision with irrefutable logic.

On the 11th of April, 1890, near the close of the session, the Legislature took the long-looked-for, long-hoped-for, and long-prayed-for action looking to the establishment of a separate State asylum for epileptics. An act was passed providing for the appointment by the Governor of a commission consisting of three persons to determine upon the manner in which provision should be made for the care of "the epileptics and the epileptic insane of the State." The commission was authorized to select and purchase a site and to adopt plans of fire-proof buildings, including heating, lighting, water-supply, and sewerage systems, which should provide complete accommodations for 1000 patients. Under this act the following commissioners were appointed: C. C. Waite, George H. Bunnelle, and John L. Vance.

The site selected by the commission was in the extreme southeastern part of the State, and consisted of 105 acres of land, which were purchased by the citizens of Gallipolis, at a cost of \$35,000, and given to the State for this object. To this gift 125 acres have since been added by purchase. The Legislature showed it had failed to recognize the real needs of an epileptic colony by limiting the amount of land that should be secured to so small a quantity as 100 acres. This was contrary to the recommendation of the State Board of Charities, which had urged the purchase of a much larger tract.

The act which authorized the appointment of a commission to select a site, and appropriated \$12,000 for their expenses, also provided that, after the completion of their work, there should be appointed by the Governor a managing board, consisting of five trustees, who should take charge of the erection of the buildings and assume control of the enter-

prise. These trustees were subsequently appointed, and they organized as a board in February, 1891. Among those active in securing this important legislation, General John L. Vance is deserving of special mention.

OHIO HOSPITAL FOR EPILEPTICS.

In the spring of 1891, an appropriation of \$40,000 was made for the erection of buildings for the "Asylum for Epileptics and Epileptic Insane,"¹ the corner-stone of which was laid November 12, 1891. On this memorable occasion General Brinkerhoff made an eloquent and feeling address. This long, unwearied, courageous effort had at last ripened into fruition, and Ohio became the banner State in entering this new field of charity, the first in this country to provide State care for a most pitiful class. The founding of this institution must have afforded profound satisfaction to the members of the State Board of Charities, and especially to General Brinkerhoff. The large-hearted, sympathetic Dr. Byers,² had he been living, would likewise have shared this feeling. It was also a source of great pleasure to Dr. Rutter and other philanthropists of Ohio, who had specially interested themselves in the enterprise.

In the history of this movement in Ohio we find a lesson teaching us that by persistent effort, long-continued and dignified appeals to a legislative body, and by educating the public in its duties and responsibilities, success in philanthropic enterprises may eventually be reached.

By the statute defining the manner in which the affairs of the institution shall be administered, the trustees are empowered to provide the necessary administrative force,

¹ In 1892 the Legislature changed the name of the institution to "Ohio Hospital for Epileptics."

² Rev. A. G. Byers, M.D., of Columbus, Secretary of the Board for nineteen years, passed away November 10, 1890.

medical skill, etc. All insane epileptics whose disease has developed during their residence in Ohio, together with all epileptic persons who have been residents of the State one year next preceding application for admission, are admissible to the hospital. Those to be admitted are apportioned among the several counties according to their population. When there is accommodation, private patients from Ohio and elsewhere may be admitted upon such terms as the trustees may determine. The trustees are required to cause an enumeration of the epileptics in the State to be made every four years. An applicant for admission must furnish such particulars respecting his case as may be required by the trustees, together with the certificate of a physician that the applicant is admissible under the requirements of the Board of Trustees, and that he is free from any infectious or contagious disease, and from vermin.

Sane epileptics are committed by the probate judge of the county of which the epileptic is a resident, upon the application of parents, guardians, or friends, or upon the application of any citizen in his own behalf. The judge may subpoena witnesses, including a reputable physician, to ascertain whether the alleged epileptic is a suitable person for admission. The court may then issue a warrant commanding the alleged epileptic to be brought before the probate judge, or, if necessary, the judge himself shall personally visit the epileptic and, upon the certificate of said judge, the proceedings may go on in the absence of the person in whose behalf the application has been made. The judge may order the physician in attendance, after examination as aforesaid, to make out the necessary certificate for the admission of the patient in accordance with the rules and regulations of the Board of Trustees. The application, with accompanying papers, is then transmitted to the Man-

ager of the hospital, who advises whether the patient can be received, and if so, at what time. If there be accommodation, the warrant of commitment may be issued to the sheriff, to any relative or friend, or to the epileptic himself, in the discretion of the judge. The fees attending commitment are defrayed as in the case of the commitment of insane persons.

If it becomes desirable to transfer an epileptic patient from any State hospital for the insane to the Ohio Hospital for Epileptics, such patient may be transferred upon the order of the Governor, upon the recommendation of the medical superintendent of such hospital and the Manager of the Hospital for Epileptics.

“ The Board of Trustees are empowered to make such rules and regulations respecting the care, custody, discipline, and discharge of patients as they may deem best for the interests of the patients and the State. All persons admitted to the hospital as patients shall, until properly discharged, be under the custody and control of the Manager of such institution, and the Manager may, subject to such regulations as the trustees see fit to adopt, restrain and discipline any patient in such manner as he may judge is demanded for the welfare of the patient and the proper conduct of the institution.”

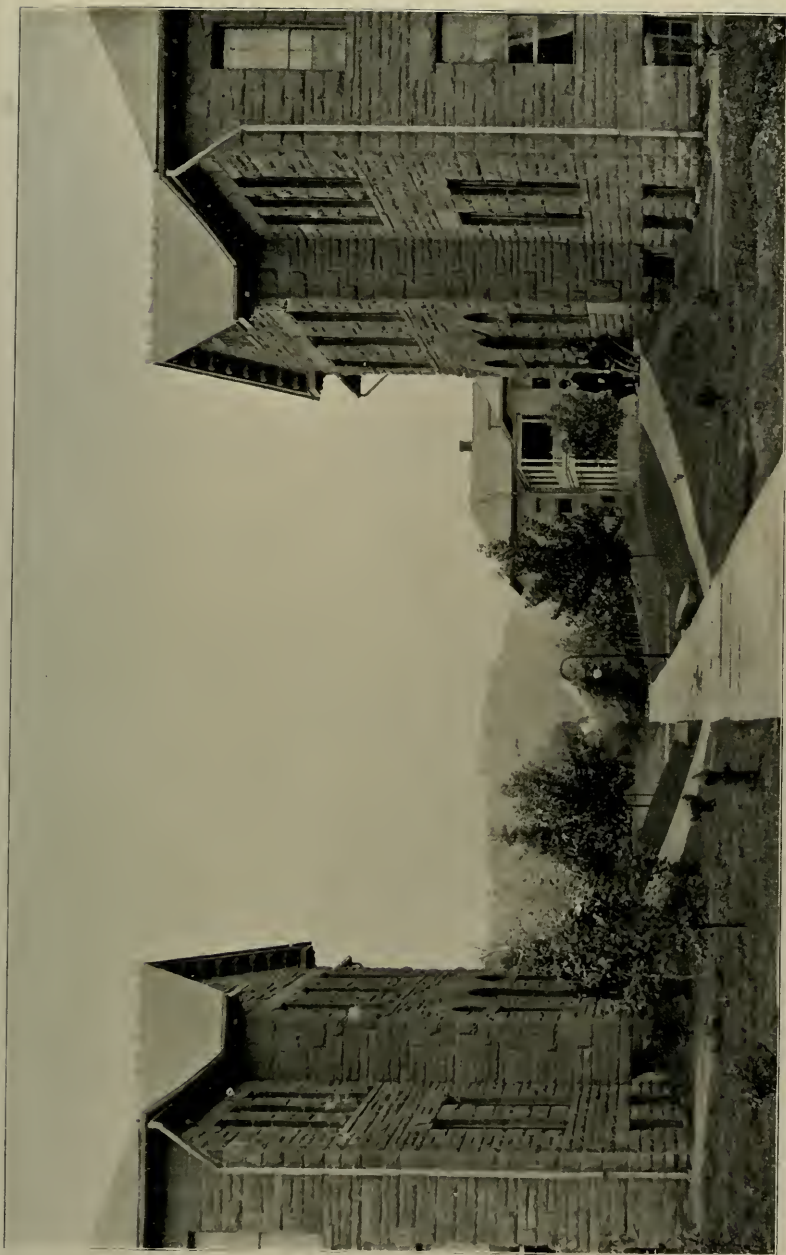
The Superintendent, Dr. H. C. Rutter, who is officially designated as Manager, was appointed August 7, 1893, and the hospital was opened for the reception of 250 male patients November 30th of the same year. The assisting medical staff consists of three physicians and a pathologist. The Superintendent is ably assisted by his wife, acting in the capacity of matron. Her calm temperament, kindly nature, and experience in domestic affairs make her well fitted for the discharge of her duties.

The hospital is situated on the banks of the Ohio River, in the outskirts of Gallipolis, a city containing upwards of 5000 inhabitants. The buildings stand upon an oblong terrace of about seventy-five acres, elevated thirty feet above the river bottom-lands, of which there is a belt about half a mile in width between the asylum and the river. Across the valley rise the wooded hills of West Virginia, at the base of which flows the river. Back of the terrace are hills intersected by valleys and covered with forest growth. At the head of one of these valleys, about half a mile distant, is situated the recently erected insane department of the institution. In this valley is a narrow strip of garden-land. At one extremity of the terrace is a bold cliff fringed with verdure. A similar cliff peering from the green foliage is seen on the brow of the range of hills back of the terrace. The eye takes in an extended view looking down the valley of the Ohio. In other directions it is picturesque, and the whole is pleasing. The soil, however, is not fertile, and the land is so broken and hilly as to make profitable farming impracticable.

The central building of the institution, intended solely for administrative purposes, has not been erected. A short distance back of the site for the administration building stands the one-story kitchen, which includes seven cold-storage rooms of different temperatures, for the preservation of various kinds of table supplies. These rooms are connected with the ice-plant. Rearward from the kitchen is the power-house, in which are the huge boilers, steam-engines, dynamos, etc. On either side of the kitchen and about fifty feet therefrom are the two dining-halls—one for men and one for women. These are two stories in height, and have a seating capacity of 800 patients. On the upper floors are several apartments for officers, and an assembly-room. On

either side of the dining-halls and a few rods away is a group of two-story stone buildings or pavilions—one for men and the other for women. Four buildings accommodating 50 patients each, and an infirmary accommodating 76 patients, constitute the group for women. There are five pavilions for male patients, with a capacity for 50 patients each, and an infirmary to accommodate 76 patients. Cement walks are laid between the different buildings and to the entrance to the grounds. The immediate approach to all the patients' residences is so graded as to do away with the necessity of steps at the entrance, thereby lessening the danger and injury to patients when falling. The first floors of the pavilions are used for day- and living-rooms, and the second floors for associated dormitories, with four or five rooms for use in case of sickness. The stairways throughout have easy risers, broad steps, and frequent landings.

All of the pavilions are comfortably and neatly furnished, those for men being somewhat plainer than those for women. All are supplied with a few easy- and rocking-chairs. Upon the floors are large rugs, curtains are at the windows, and, in the women's department, there is a tasteful arrangement of drapery. There are pictures upon the walls and flowers generally upon the tables in the sitting-rooms. In the building occupied by boys is a large playroom. Thirty-five of the girls are in one of the pavilions for women, and the remainder are distributed in other of the women's buildings. Wooden bedsteads of the French pattern, with head- and foot-boards and sides, are used in some of the dormitories, and in others there are iron ones painted white. Good horsehair mattresses are in general use, and all the bedsteads have woven-wire mattresses. Bright rugs are on the floor and a comfortable chair is beside each bed.



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PARTIAL VIEW OF GROUP OF BUILDINGS FOR MEN.

The basements have no communication with the upper floors, and are under the special charge of an engineer. The space not otherwise occupied is used for dry storage. There is a steam-engine in the basement of each pavilion, propelled by steam generated at the power-house and brought thither in a subterranean passage, in which are also laid the water-, steam-, and gas-pipes, and the wires belonging to the electric system, which places all the buildings in telephonic communication with one another. By means of an engine and a fan in the basement of each pavilion, propelled by steam from the power-house, good ventilation is effected, the fresh air being taken from the outside. The air in all the buildings is kept pure; even the atmosphere in the closets is untainted. The dormitories are vacated during the day and exposed to window ventilation. The heating of the buildings by indirect radiation is effected by steam from the power-house. Open fires are provided, not only in the sitting-rooms, but also in the dormitories. The pavilions are provided with lavatories, flush closets, and bathing facilities, all of modern construction. All of the buildings occupied for living purposes have screens at the windows made of No. 8 wire with three-inch mesh. Dr. Rutter deems these screens necessary to prevent patients from falling out. In one instance a patient ran to the window in a fit of temporary aberration, threw herself out, and was killed. In the insane department, not only all the windows, but the verandas also, are screened in this way.

The laundry, a building of varied outline, is situated a short distance in the rear of the pavilions for women, and accommodates seventy-five patients. It has two departments—one used as a residence, a dwelling two stories in height, with separate entrance; and the other a working, or laundry, department, which is one story high. On the first

floor of the residence portion are two large day-rooms for patients, and on the second floor a large associated dormitory, an attendants' room, and a number of private rooms for the sick. The building is also provided with the necessary rooms for offices, bathrooms, lavatories, etc.

The industrial building is a two-story structure, with a basement which is used for storage purposes, for heating apparatus, etc. There are four large rooms on each of the two floors above the basement. No machinery is operated here, Dr. Rutter believing that its use is attended with danger to the patients. At present the rooms of the industrial building are devoted to the following uses: two for sewing-rooms, one for mending, repairing, and registering clothes, one for upholstering, one as a carpenter's shop, one as a shoeshop, one for repair work and basket-making, and one for the pathological laboratory. The laboratory is under the direction of Dr. A. P. Ohlmacher, assisted by Dr. W. J. Webster. The lines of work followed are studies in gross and microscopic pathology, bacteriology, chemical pathology, and investigations along such clinical and therapeutic lines as are suggested by progress in this department. Post-mortem examinations are held in all cases, and specimens are preserved. Reports made at irregular intervals are published in the current medical journals, and then collected and issued in the form of Bulletins.

The schoolhouse for girls is a one-story building fronting the large lawn which separates the dining-hall for women from the women's cottages, and some five hundred feet rearward from these buildings. The schoolhouse is divided into two parts, which are, at present, used for different sexes. It is the intention to construct a schoolhouse for boys, which will be situated in a corresponding location on the male side. Each department of the present building con-



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PARTIAL VIEW OF GROUP OF BUILDINGS FOR WOMEN.

sists of a schoolroom, a retiring-room to be used temporarily in case of attacks, a lavatory, and a cloakroom.

The department for insane epileptics, a fire-proof building for the accommodation of 200 patients,—100 men and 100 women,—is constructed of pressed brick of a light fawn color. It stands upon the hillside and shows three stories in front. Two wings extending rearward from the main portion of the building are two stories in height, and partially enclose a large court in which is located the boiler-house for heating the building. The asylum is independent of the institution proper, except that it is lighted by the general electric system, the bread consumed is supplied from the general bakery, and the washing is done in the laundry. Each ward consists of day-rooms, with access to verandas on either side, an associated dormitory for fifty patients, a dining-room, an attendants' room, clothing-room, lavatory, bathrooms, and six private rooms built with sufficient strength to be used for the isolation and seclusion of patients when necessary. The leading features of the asylum are: first, simplicity; second, its iron-screened verandas by which patients may be freely admitted to the open air during any time of the day. The cost of the asylum, including the power-house with its machinery, etc., was \$400 per capita. It is a substantial, well-built, fire-proof structure. Its estimated cost, not fire-proof, was \$300 per capita.

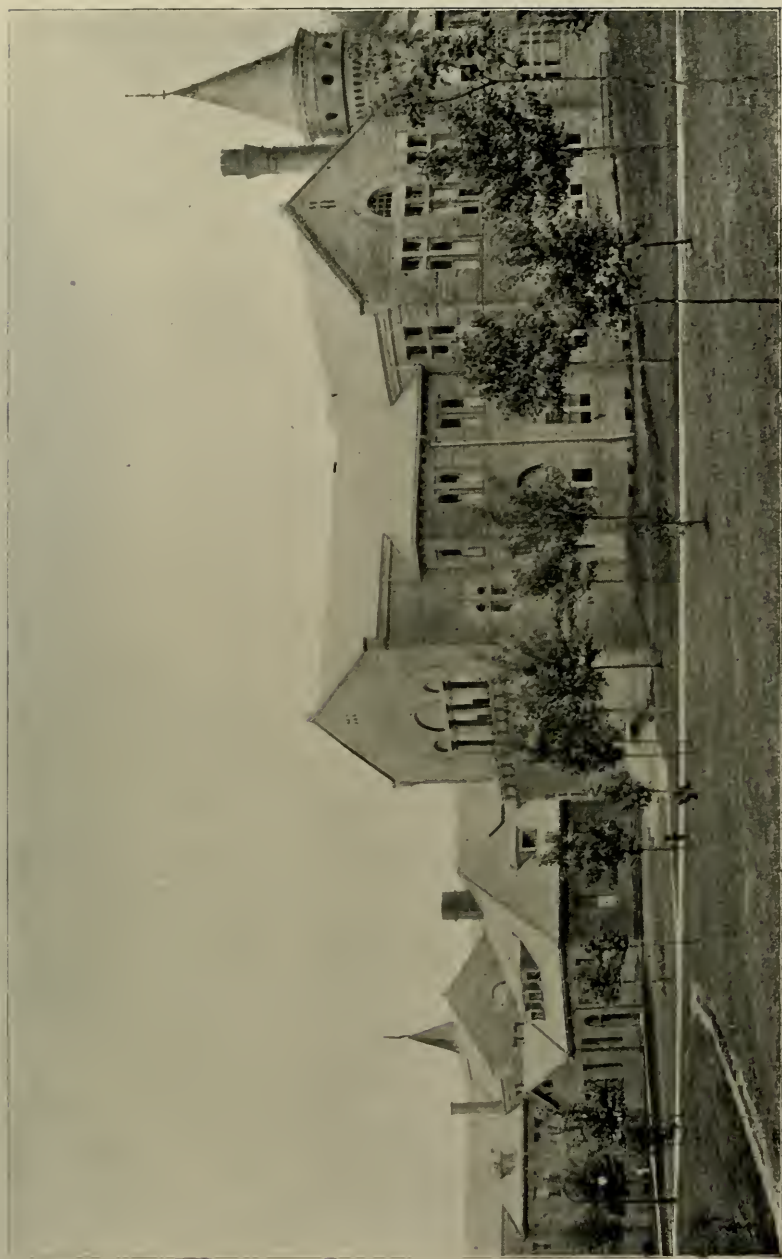
All of the buildings, except the insane asylum, are of buff-colored sandstone, rock-faced. This stone was taken from a quarry on the place, and sand and clay of a good quality for building purposes are also found on the estate. The original plan of the institution, upon which the first buildings were erected, was on a somewhat grander scale than that upon which later buildings have been constructed.

The latter are less pretentious, but equally well, if not better, adapted to their purposes. The total expenditures for improvements of every kind to May, 1898, amounted to \$540,000. It is in contemplation to erect from future legislative appropriations, in addition to the administration building, a hospital for each sex, which is especially needed, a chapel building, and an amusement hall; also a separate residence for the Superintendent. The administration building will have no dining-room nor kitchen. Here will be concentrated all the executive work. Further extensions are proposed as exigencies may demand, in the shape of cottages to accommodate from ten to twenty patients each, to afford better classification than can now be had.

The buildings are lighted throughout by electricity generated at the power-house. This is supplemented by gas supplied from the city gas-works, for use in cases of emergency and for ironing in the laundry. Thirteen arc lights at different points about the place illuminate the grounds in the evening.

Water is now supplied from the city water-works at an annual rental of \$500. Considerable expenditure has recently been made towards obtaining an independent supply by means of deep wells, using compressed air to elevate the water to a storage reservoir on the hill in the rear of the central group of buildings. It is believed that this plan will afford an ample supply.

Sewage is discharged into a tributary of the Ohio, but against the protests of residents and local boards of health. With a recent appropriation it is proposed to introduce an elaborate sewerage system for the entire institution, except the insane department, upon the plan adopted at Brockton, Massachusetts. For the insane department an experiment has been tried of a new adaptation of the inter-



WOMEN'S DINING-HALL.

KITCHEN AND BAKERY.

OHIO HOSPITAL FOR EPILEPTICS.

MEN'S DINING-HALL.

mittent filtration principle, of which Dr. Rutter says: "This has proved successful, and it takes care of the sewage for 250 people at an outlay of less than \$1000. We are making a careful analysis of the outflow for publication."

It is the aim of the Manager to have the patients engaged at some industrial occupation so far as is consistent with their welfare. Outdoor employment, however, is restricted by the limited acreage of arable and productive land. The patients have assisted in the improvement of the grounds, and, as far as practicable, they are employed in the gardens and in the care of the lawn. A large conservatory for plants has been made by their labor. The kitchen, dining-rooms, store-rooms, and laundry furnish occupation for a considerable number, and a few are engaged in clerical work in the offices and some other departments. All the clothing for female patients is made by the inmates, and the making of the mattresses, comforters, sheets, and pillows is also the work of their hands. Other industries include bookbinding, the making of splint baskets, the upholstering of furniture, and the repairing of shoes. Arrangements will soon be made for the manufacture of brooms, brushes, shoes, willow baskets, and all the clothing for the men and boys. The plant for manufacturing ice has a capacity of eighteen tons daily. The low price of bituminous coal, which is furnished from a side-track of the railway at a cost of from \$1.05 to \$1.15 a ton, enables the institution to manufacture this commodity at a comparatively small expense.

It is intended to establish a manual-training school, in which the young may be taught useful trades and where adults may be occupied to advantage. It is also expected that a brickyard and joiner's shops will in the near future prove an advantage in the erection of new buildings. A dairy farm is much needed, and should be secured if suit-

able land can be obtained in the vicinity. At the time of my visit, 125 gallons of milk were purchased daily at twelve cents a gallon for the use of the patients. The caring for a dairy that would supply the institution with milk would afford congenial employment to a large number of patients.

The two dining-halls are subdivided into rooms to permit of the following classification: a room for officers, one for employees and a better class of patients, and one for a less refined class of patients. The children are separated into three classes and eat at separate tables in the rooms with the adults. Each table accommodates eight persons. Dr. Rutter recommends a still further classification of patients into separate rooms. The patients come from the different buildings to the dining-rooms regardless of the weather. If it rains or snows umbrellas are carried.

The regulation of the diet is regarded as one of the most important means of treating epilepsy, not only as to what the patients eat, but how they eat. The constant tendency on the part of epileptics is to eat too fast, and on the part of attendants to hurry meals and have them soon over. Meals are therefore served in three courses, and no food is placed upon the tables at any time until all are seated. Steam-heated tables in adjoining rooms keep the food warm until it is served. Observation and experience since 1893 have demonstrated the wisdom of allowing a free meat diet only for the midday meal. Fresh beef, roasted or boiled, mutton, fowls, and fish enter into the bill of fare. No article of food is fried. Fresh fruit is freely allowed in its season, and fruit is largely used in canned or evaporated form when not otherwise obtainable. It is liberally supplied at breakfast and supper, and is supplemented by cereals and milk. Coffee is also served for breakfast. Bread is not used until thoroughly cold. Hot corn-cake is occasion-



RESIDENCE FOR 75 FEMALE PATIENTS.

LAUNDRY.

GIRLS' SCHOOLHOUSE.

OHIO HOSPITAL FOR EPILEPTICS.



OHIO HOSPITAL FOR EPILEPTICS.

DEPARTMENT FOR THE INSANE.

ally allowed. Certain vegetables, such as cabbages and cucumbers, denied epileptics by some superintendents, are not regarded as objectionable at the Ohio Hospital. The daily record of attacks and the daily record of the dietary are carefully compared and afford a profitable study.

The daily routine is as follows: The patients are called at 5.30 o'clock; have their breakfast at 6; dinner at 11.30; and supper at 5. They retire at 8 o'clock in winter and at 8.30 in summer.

The social influences of the colony are found to affect even the most degraded, especially among the younger patients. The prayer-meetings in the different houses and the regular religious services in the chapel, the Sabbath-school, and the entertainments in the amusement hall have been potent factors for good. An effort is made to afford the patients as large opportunities for social, moral, and religious improvement as are open to people in the ordinary walks of life.

A summer picnic is one of the enjoyable occasions of the year, which is looked forward to with much interest. Last year the preparations in the domestic department included the cooking of 250 chickens, baking quantities of plain cake, etc., and the making of copious supplies of ice-cream and lemonade. The party was accompanied by a band. A special train was provided, and all were taken to a pleasant locality some sixty miles away. A short time previous to my visit between 500 and 600 patients were taken to Forepaugh's circus without any accident or embarrassment.

A large stereopticon having one thousand different views is a frequent means of evening entertainment. Brief lectures accompany the display of the pictures. There are baseball teams which compete creditably with teams of neighboring localities. For the women lawn-tennis and croquet grounds

are provided. For indoors they have all ordinary games, such as checkers, backgammon, dominoes, and cards. A limited collection of entertaining books is supplied. A few popular magazines and some newspapers are contributed. In respect to desirable reading matter there appeared to be a marked deficiency.

It was my pleasure to be present at one of the evening entertainments in the assembly-hall, which was brilliantly lighted and tastefully decorated. There were gathered about two hundred patients of both sexes, among whom was a fair proportion of boys and girls—all under the charge of about thirty male and female attendants. The patients were neatly and tidily dressed. The male attendants were attired in the customary gray cloth uniforms trimmed with black braid; the female attendants also wore the regulation dress of gray trimmed with black, with white collars and white aprons. There were a few citizens from Gallipolis in attendance. An orchestra composed of patients rendered pleasing music from the bass viol, violins, wind instruments, and the piano. In addition to popular dances, there were marching and counter-marching in shifting lines and columns. The various changes were called off by one of the supervisors. The occasion was a very pleasant one.

The day-schools for both sexes have one male and one female teacher. The children are taught according to their capacity for the reception of knowledge, either by means of kindergarten methods, embracing the ordinary object-lesson system of teaching, or by the common-school methods of instruction in reading, writing, drawing, arithmetic, and language lessons. They are not pushed in any of these studies beyond what is considered prudent and proper. It is asserted that there is a constant improvement in the mental, moral, and physical condition of the children.

In a pleasant sub-parlor of one of the men's pavilions I saw one of the patients, an intelligent-looking man, engaged in teaching vocal music to a class of nine patients. All had books in their hands and appeared to be absorbed in their lesson.

Large opportunities are given for devotional exercises according to the belief of the individual. A service is held every Sunday afternoon, which is conducted by pastors from the city, those of different denominations serving in succession. A Catholic priest says mass at stated intervals.

The school-teacher conducts a Sabbath-school in which song service predominates. Between 200 and 300 persons, both children and adults, usually participate in the service.

Prayer-meetings are held twice a week in some one of the pavilions that can be set apart for the purpose. These are conducted by clergymen patients, among whom are Methodists, Baptists, Christians, and those of other denominations. Attendance is entirely voluntary. Controversies are forbidden, and difficulties seldom attend the holding of these meetings. They run along, Dr. Rutter said, quite smoothly for perhaps several months, when there may be a demonstration of some kind. At one time a discussion between a Baptist and a Methodist ended in a fight. An encounter may occur at any time between two persons who are on the most friendly footing about so slight a matter as the weather, one asserting, for instance, that the appearance of the clouds indicates rain, the other denying the assertion as absurd, and the controversy running into a question of veracity as to what one or the other had said, and ending in a personal conflict.

Dr. Rutter said that the difficulties experienced at the outset in harmonizing the discordant elements brought

together here from all ranks of life were very great. Two hundred and fifty epileptics—some from family homes, where selfishness had been developed by the indulgence of every whim; some from almshouses, where discipline is often lax—were brought together with the expectation on the part of friends that the condition of all would be improved and that some would be cured. The task was a severe tax upon human ingenuity and patience, and there was no similar institution in this country to which one could look for sympathy and counsel. But with the development of the hospital and larger means for classification, the patients improved; and the results of the efforts put forth are gratifying to the management. The number of quarrels is said to be less now than it was with the first fifty patients.

Discipline is maintained by restricting the privileges of the patients and by personal appeals to their higher natures. An appeal to their sympathy in behalf of one afflicted like themselves and entitled to forbearance is frequently most effective. No physical punishment is permitted under any circumstances. When patients become dangerous and destructive, they are placed in a room alone, but are brought out as soon as they seem to be able to control themselves. One of the lady supervisors, who had had six years' experience in the Toledo Asylum for the Insane, told me she had found that epileptics were much more difficult to get along with than the insane. The Superintendent complains that, from a lack of laws prohibiting the sale of intoxicating liquors within a prescribed distance of the institution, his efforts to benefit his patients are in some degree neutralized.

Attendants are not specially trained before entering the asylum. As good, intelligent, and reliable men and women as can be found, having tact, patience, and orderly habits, are selected. In the infirmaries there are five attendants

to each group of seventy-six patients. At night there are on duty one general supervisor for the women and one for the men, each of whom is assisted by five night-watchers. In the insane asylum there are one physician, a matron, and two head attendants—one male and one female—who assume direction over the subordinate force. There is on an average one attendant to thirteen insane patients. In the other buildings there is usually one attendant to about eighteen epileptics, although in some of the wards there is but one to twenty-five patients. Male attendants are paid from \$25 to \$30 a month, according to their intrinsic worth and the duties they discharge. Women attendants are paid from \$18 to \$20 on the same basis.

The number of admissions to the hospital from its opening in 1893 to November 30, 1898, was 1295, eight of which were readmissions. Of the patients received during the period named, 1217 were born in the United States, 33 in Germany, 10 in England, 8 in Ireland, 5 in Switzerland, and 8 in other countries. The nativity of 14 was unknown. While 1002 of the patients admitted were subject to epileptic seizures before they were twenty years old, 758 had passed that age before they were received into the hospital. Of the latter number 153 were married, 29 were widowed, 11 had been divorced, and 565 had never been married. The number discharged as recovered during the period named was 81, as improved 180, unimproved 104. There were 108 deaths. Patients are not considered recovered until two years have elapsed after their last seizure. At the date of April 1, 1899, there were 898 patients in the hospital—458 males and 440 females. Thirty-eight of the inmates were boys and 67 were girls under ten years of age, and 182 were boys and 154 were girls under twenty years of age. The capacity of the institution is for 900 patients.

The per capita annual cost of maintenance as given April 1, 1899, was \$128.52, which includes the total current expenses and officers' salaries. The value of the supplies raised upon the farm is not considered in computing the cost of maintenance.

There is a continual demand for admission. The applications now on file number upwards of 1300. Many of the applicants, it was said, were inmates of the poorhouses, and many belonged to the needy classes who have no adequate means of support, and are not only burdens, but a cause for apprehension, to the communities in which they reside.

Considering the peculiar idiosyncrasies of epileptics, there appeared to be about this institution an air of quietness and contentment that was gratifying to witness. This I attributed in a great degree to the demeanor of the Superintendent, who moved about among his patients as a kind father among his children. There was freedom without familiarity, gentleness without weakness. All questions put to him were properly answered, and there was an evidence of satisfaction attending his replies that betokened confidence. Dr. Rutter said: "I make it an invariable rule to listen to any complaint that may be made to me, and to show personal interest in the affairs of all patients, no matter how trivial they may seem to be, or how much my time may be needed for other purposes. They are all taught to feel that they can come to me at any time with any complaint and receive kind and attentive consideration." The attendants, as is usually the case, manifested the same disposition as the master spirit of the place, and deference and consideration were shown instead of coldness and unconcern. Dr. Rutter is deeply interested in his work, believing that the greatest of all psychological fields is the study of epilepsy.

CHAPTER III.

NEW YORK.

THE State Commissioner in Lunacy for New York, Dr. John Ordronaux, in his First Report, presented to the Legislature in 1874, recommended the establishment of a State hospital for epileptics, and dealt with the subject in the following language :

“ Statistics show that there are at present, in the various lunatic asylums and almshouses of our State, 436 epileptics, of whom 245 are males and 191 females. The majority of these receive no medical treatment whatever, their disease being looked upon as a simple periodical aberration of the functions of the nervous system, terminating in a fit. Hence they are placed promiscuously among the young, the sick, and the susceptible, without reference to the shock which their attacks can impart to others, or the dangers of violence from them arising at such times. Physicians understand well enough that epilepsy is one of the common ante-chambers of insanity, and the statistics of crime show that, short even of mental unsoundness, epileptics suffer such a degeneration of their moral nature that they cannot be treated as enjoying an unclouded moral perception. They are always standing, therefore, on the border-line of disease, and present the most difficult problems relating to personal responsibility at law.

“ It is for the interest of the State to prevent crime, no less than to punish it, and the number of epileptics now

within our county asylums points to the existence of a source of crime which should be controlled, as well in the interests of justice as of humanity. The time has fully come when a State hospital for epileptics is an imperative necessity. For, even apart from crime, these unfortunates need special medical treatment and vigilance such as they cannot receive in county almshouses. Nor are they properly placed in lunatic asylums, where their own disease is a source of disturbance to the patients, and these, in turn, an unfit association for them."

In his Second Annual Report the Commissioner repeated the recommendation, and continued to do so, urging pressing reasons therefor, in his Third, Fourth, Fifth, Sixth, Seventh, and Eighth Annual Reports, down to 1882. It is not a matter of surprise that his oft-repeated recommendations, calling for another State institution, were not acted upon, in view of the vast sums the State was then expending yearly on the State hospitals for the insane,—several thousand dollars per capita,—and the pressing demand for further accommodation for this class.

The State Board of Charities, in its Annual Report to the Legislature for the year 1878, directed attention to the necessity for adopting some immediate measures of relief for epileptics in terms as follows :

" The subject of providing for the care and treatment of epileptics has long attracted wide attention, but thus far little has been accomplished regarding the matter, either in this or other countries. The regulations of most of the insane asylums exclude this class from their benefits, yet considerable numbers of them, from time to time, under various pretexts, gain admission to these institutions. That epileptics need intelligent oversight and care, equally with the insane, both on account of their helplessness and dangerous

tendencies, is fully and very generally recognized. The disease, although not offering large hopes of recovery, is subject to the influence of remedial agencies; and it would appear to be wise economy, therefore, suitably to provide for the treatment of this class, as the disease early destroys the capacity for self-maintenance, and, in the case of the poor, soon induces pauperism. The hereditary tendency of the disease is also clearly established, and it would seem incumbent upon the State, in consequence, to institute positive measures to protect society against its increase."

In seeking for the germs of the movement for colonizing epileptics in this country we must look in another direction. Dr. Frederick Peterson, while assistant physician of the Hudson River State Hospital for the Insane, had a considerable number of epileptics under his charge and became specially interested in the treatment of this class. In 1886, in pursuance of their interests, he visited the colony for epileptics at Bielefeld, in Westphalia, of which little, if anything, was then known in this country. After his return home he wrote a full description of this peculiar and highly successful work, which was published in the *New York Medical Record* in April, 1887. The article attracted much attention and was republished in England.

Dr. Peterson in his zeal continued to write upon this subject for medical and other journals, and his whole-souled devotion to the cause he had espoused, laid broad and deep the conviction in the public mind that a State colony for epileptics was an immediate and pressing necessity. He presented the subject in charity conference meetings, at State conventions of Superintendents of the Poor, and elsewhere. He also urged the matter upon the attention of the State Charities Aid Association, of which society he was, and is at present, a member, and secured its influence

and co-operation. A sub-committee, consisting of Dr. Peterson and Dr. George W. Jacoby, was appointed to report to the Association on the subject of State provision for epileptics. The following views were expressed in the able report made by this committee:

“ That hospitalization is impracticable is the opinion of all who have investigated the subject. Those epileptics who are only slightly affected by their disease will not remain in a hospital without occupation and systematic employment, and those who are severe sufferers with marked mental affection cannot be kept there. Even the care of simple epileptics without any insanity differs greatly from that of any other class of patients, and their treatment in any hospital is a difficult matter. With the organization of epileptic wards in general asylums matters are in the same unsatisfactory condition. The plea of certain supporters of the asylum system, that every epileptic should be legally placed in confinement, because he is either insane or may become so eventually, is a plea which is contrary to every principle of right and wrong. If a hospital for epileptics were consolidated under one management with an asylum, it would be necessary to make a distinction between temporarily mentally deranged epileptics and purely convulsive ones, a distinction which is decidedly artificial, as thus the temporarily mentally disordered epileptic would be constantly transferred from hospital to asylum and from asylum to hospital. On the other hand, the entire question can be solved by the creation of colonies, the admission to which is not to be regulated by the mental condition of the patient, but in which, after admission, a classification could be made of those afflicted with severe mental defects, of those who are able to work, and of those requiring education. Further classification, according to general aptitude, frequency of

attack, temperament, and educational status, would, of course, be advisable."

During the legislative session of 1890, Dr. Peterson caused to be introduced in the Legislature a bill providing for the selection of a site for a colony for epileptics. With his consent, a bill of like purport was afterwards substituted for his by the State Charities Aid Association. It failed, however, to become a law.

In 1892, a bill was introduced in the Legislature, by request of the State Charities Aid Association, directing the commissioners of the State Board of Charities to select a suitable site whereon to establish an institution on the colony plan for the medical treatment, care, education, and employment of epileptics. The commissioners were authorized to contract for the purchase of such a site, conditioned upon the approval of the Legislature, and to report plans and estimates of cost of constructing buildings suitable for the purpose. The proposed legislation, in addition to the influence of the State Charities Aid Association, had the support of the State Board of Charities, as also of the Superintendents of the Poor, who, at a State convention in 1891, adopted a preamble and resolution setting forth the fact that proper facilities for the care, treatment, and employment of epileptics in the county poorhouses and town and city almshouses did not exist, and recommending the establishment of a State institution for this class.

The State Commission in Lunacy in its Third Annual Report, submitted to the Legislature February 15, 1892, recommended separate care for epileptics in the following terms:

"There can be no question as to the desirability of the State making special provision for epileptics of the dependent and semi-dependent class, apart from the insane. The practice which now obtains of confining epileptics proper in

hospitals for the insane, as insane persons and commingled with the insane, is an injustice to both classes, and one which, in the opinion of the Commission, the State should take early steps to remove by the establishment of a State hospital especially devoted to the custody, care, and treatment of epileptics."

The measure was also approved by many of the superintendents of insane asylums, leading physicians, and the press throughout the State. The bill passed both Houses of the Legislature, was approved by the Governor, and became a law May 12, 1892.

Soon after the passage of the act a committee was appointed by the State Board of Charities, consisting of President Craig and Commissioners Letchworth and Walrath, who were charged with the duty of inspecting sites, examining plans, and ascertaining facts relative and important to the object of the statute, namely, the establishment in a proper situation, with a proper organization, of a colony for epileptics. The committee soon after its appointment issued a circular addressed to Senators, members of Assembly, justices of the Supreme Court, and clerks of Boards of Supervisors, representing all the counties in which it would appear that a colony might be advantageously established, inviting suggestions for proper sites, with full particulars as to market values of land, proximity to town, etc., and presenting the following points as essential to be considered in the selection of a site:

" 1. A tract of good land, including not less than one thousand acres, and embracing numerous situations for a colony or village of small shops and residences, with one or more larger buildings for hospital and administration uses, to accommodate a population of from one thousand to two thousand patients.

“ 2. A healthy location, with climate inviting outdoor work and life, and pleasant scenery.

“ 3. A sufficient supply of pure water for distribution throughout the buildings by gravity.

“ 4. Facilities for the easy and final disposal of all sewage, without danger of polluting waters that are used for drinking purposes; and for good surface drainage, with freedom from secret springs and sub-moisture.

“ 5. Railway communication for passengers and freight, with advantages for side-track or switch to the grounds.”

A large part of the summer of 1892 was taken up by members of the committee, either collectively or separately, in examining sites and collecting information bearing upon the subject. The committee found that the centre of the epileptic population of the State was in its southeastern portion, and would have preferred to locate the colony there had circumstances warranted, but the mountainous character of the country and other objections rendered it impracticable. The superiority of a site at Sonyea, in Livingston County, offered by the United Society of Christian Believers (commonly called Shakers) was so manifest that the committee were predisposed in its favor. It consisted of a large tract of land upon which were numerous buildings that had been erected by the Shakers for the purposes of the community, and presented in their arrangement and relation to one another the aspects of a colony. One of the original purposes of the Society was to receive and maintain orphan children, some of whom would take the place of deceased members; but the multiplication of institutions for homeless children in Western New York stood in the way of thus increasing their numbers, which their practice of celibacy also restricted. The members were mostly advanced in years, and as their numbers were

gradually but surely diminishing, they decided to sell their home at Sonyea and unite their fortunes with a similar society at Watervliet, N. Y. The earnest and expressed desire of the Shakers was to have the Sonyea property dedicated to some charitable work. Believing that their own work was of this nature, they desired that a benevolent purpose might be perpetuated in connection with the estate. For this reason they preferred not to sell it out in parcels, which they could have done at greater pecuniary advantage. The committee concluded that the purchase of the property was desirable and so reported to the Board, with plans and estimates for improvements, which were endorsed by the Board and forwarded to the Legislature with recommendations in a full report upon the subject, including maps, surveys of engineers, affidavit as to healthfulness of site, chemical analysis of the water, photographs of buildings, etc., all of which had been collected and prepared under the direction of the committee. In the performance of its duties the committee invited the co-operation of Dr. Peterson, who rendered it valuable gratuitous assistance.

In 1893, a bill, prepared by the State Charities Aid Association, substantially in conformity with the recommendations and report of the State Board of Charities, was introduced in the Legislature by request of the Association. It passed both Senate and Assembly, but was vetoed by Governor Flower. In his memorandum concerning it he declared it to be a worthy movement, but objected to sanctioning it on account of heavy demands upon the State treasury for the support of the insane, and because he did not approve of its provisions relating to the government of the colony.

The veto of the bill was a severe disappointment to a great number of philanthropists and scientists throughout

the State, who saw in its provisions the fruition of long and weary efforts, and who felt that the broad and fertile domain at Sonyea would be an acquisition of incalculable value to the State.

The securing of the property by legislation now seemed like a futile effort, and no further movement was made in the matter until near the close of 1893, when a new option of purchase was obtained from the Shaker community by Mr. H. E. Brown. At the request of Governor Flower, Dr. Peterson and the writer held a special conference with the Governor, and modifications in the bill of 1893 were agreed upon and concurred in by the State Charities Aid Association, and the bill was presented to the Legislature by the Association. This bill, largely through the efforts and sympathy created for it by the State Charities Aid Association, and the education of the people by the press, passed both Houses of the Legislature, the vote in the Senate being unanimous in its favor. The act was approved by the Governor April 25, 1894.

In January of this year, Oscar Craig, President of the State Board of Charities, died greatly lamented. Although having a large and lucrative practice, he set it almost entirely aside in voluntary service to the State Board. His legal ability was of a high order, and his benevolence was unbounded. In consideration of his distinguished services to the State, at the suggestion of Governor Flower, the colony was designated in the bill as the Craig Colony.

The bill appropriated \$115,000 for the purchase of the Sonyea property, and provided that the design for the improvement and development of the colony should be approved by the State Board of Charities.

The act to organize and establish a colony for epileptics—Chapter 363, Laws of 1894—is drawn in substantially the

same form as the organizing acts establishing the New York State hospitals for the insane, except as to modifications necessary to adapt the institution to the reception, care, and treatment of epileptics. The act sets forth the objects of the colony and the principles upon which it is founded as follows:

“ The objects of such colony shall be to secure the humane, curative, scientific, and economical treatment and care of epileptics, exclusive of insane epileptics, to fulfil which design there shall be provided, among other things, a tract of fertile and productive land, in a healthful situation, and an abundant supply of wholesome water, sufficient means for drainage and disposal of sewage, and sanitary conditions; and there shall be furnished, among other necessary structures, cottages for dormitory and domiciliary uses, buildings for an infirmary, a schoolhouse, and a chapel, workshops for the proper teaching and productive prosecution of trades and industries; all of which structures shall be substantial and attractive, but plain and moderate in cost, and arranged on the colony or village plan.”

An amendatory act provides that there shall be a board of twelve unsalaried managers, appointed by the Governor for terms of three years each and confirmed by the Senate. Each of the eight judicial districts of the State is entitled to a representative on the Board; and the seventh district, in which the colony is situated, and the fifth, sixth, and eighth districts, have each an additional member.

Provision is made for the appointment by the Board of Managers of a superintendent, who shall be “a well-educated physician and a graduate of a legally chartered medical college, with an experience of at least five years in the actual practice of his profession, including one year’s actual experience in a general hospital, and who shall be certified as qualified by the Civil Service Commission after a competitive

examination.” The act also provides for the appointment of a treasurer by the managers outside of their own number. These officers hold their appointments subject to discharge or suspension in the discretion of the Board. The steward, matron, bookkeeper, teachers, attendants, assistants, and other subordinates are appointed by the Superintendent, who prescribes their duties and places, and, subject to the approval of the Board of Managers, determines their compensation. The Superintendent, subject to the Board of Managers, is required to “maintain salutary discipline among all employees, patients, and inhabitants of the colony, and enforce strict compliance with his instructions and uniform obedience to all the rules and regulations of the colony.” It is required that the Treasurer shall deposit all moneys received for the care of patients, and all other revenues, in a bank designated by the Comptroller, and make regular reports to him. The Board of Managers is required to report annually to the State Board of Charities.

In the admission of patients, the act establishing the colony provides that there shall be received and gratuitously supported in the colony epileptics residing in the State who are unable either of themselves or through their parents or guardians to provide for their support therein; that preference shall always be given to poor or indigent epileptics over all others; and that those able to support themselves only in part shall take precedence over those wholly able to support themselves. Whenever an epileptic becomes a charge upon the public it is made the duty of the poor authorities responsible for his care to place him in the colony. Such authorities are also required to furnish annually to the State Board of Charities a list of all the epileptics in their jurisdiction, with such particulars as to their condition as shall be required by the Board. It is

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provided that the annual per capita allowance to the Board of Managers for board, lodging, medical treatment, care, and tuition of State patients shall not exceed \$250. Each State patient, while in the colony, is entitled to receive annually from the Board of Supervisors of his county the sum of \$30 for clothing. The colony is required to keep an itemized account of all articles of clothing furnished patients, and send a bill for same to the county authorities of each county on the first day of October of each year. It is a rule of the colony to send to the friends or relatives of the patient a notice, on the admission of each patient, asking whether such friends or relatives prefer to furnish clothing for the patient or whether the same is to be furnished by the State. This is done in order that those desiring to provide a better quality of clothing than that furnished by the State may have the opportunity of doing so.

In the reception of epileptic children as State patients, the statement of particulars accompanying each application must be verified by the affidavits of the petitioners and of two disinterested persons, and accompanied by the opinion of a qualified physician, all of whom must be certified to be credible by the county judge or surrogate of the county, who must also certify that the patient is a proper candidate for admission to the colony. An epileptic child not coming under the designation of State patient may be placed in the colony by the poor authorities upon the application of a parent, guardian, or friend, with satisfactory proof that the health, morals, comfort, and welfare of such child may be endangered if it is not placed in the colony, provided the expense of the care of the child is met by the Board of Supervisors, which is authorized to recover the cost of maintenance from the parents or guardians.

Whenever applications are made for the admission of

more State patients than can be properly accommodated in the colony, the managers are required to apportion the number received so that each county may be represented in the ratio of its dependent epileptics to the dependent epileptic population of the State, as shown by statistics furnished by the State Board of Charities. When the capacity of the institution will permit, private patients may be admitted into the colony on terms prescribed by the Superintendent and approved by the managers.

Patients may be discharged from the colony by the Superintendent, with the approval of the managers; but in no instance is it lawful to return a patient to the poorhouse, either directly through a superintendent of the poor or otherwise. If a State patient becomes insane while an inmate of the colony he must be sent to the State hospital of the district of which he was a resident just prior to his admission to the colony. His transfer must be effected in a manner prescribed by the State Commission in Lunacy, at the expense of the State; and the institution to which he is sent may be required, under regulations made by the Commission, to send a trained attendant to accompany the patient to the hospital. For every female patient thus transferred there shall be provided a female attendant. In case the friends of an insane patient desire his removal to a State hospital other than the one in the district of which he was a resident previous to his admission to the colony, such wish shall be granted provided there be sufficient accommodation in such hospital for his reception. A private patient who becomes insane is committed, subject to the regulations of the State Commission in Lunacy, to such institution for the insane as may be designated by such patient, his relatives, or friends, all expenses incident to the removal being paid by them.

Soon after the opening of the colony it was found that some restless patients from the poorhouses and almshouses, among whom were those most needing colony treatment, would leave without permission, and that the Superintendent could not legally restrain them from doing so. These patients would sometimes return to the colony in a pitiable condition, bereft of the advantages of their previous treatment. Under these conditions the management found that the real aims of the colony were in a measure defeated, and the attention of the Legislature was directed to the subject. This embarrassment was overcome by Chapter 359, Laws of 1898, which provides that the Superintendent, subject to the supervision and control of the Board of Managers, shall have the custody of patients admitted to the colony and enforce such discipline as he may deem to be for the interests of the patients and of the colony.

CRAIG COLONY.

The Genesee Valley, the garden of the State, in which is situated the Craig Colony, was designated by the proud Iroquois the Beautiful Valley. With its temperate climate, its streams of pure water, and its immense forest trees and other luxuriant growths produced by the richness of the soil, it was regarded by the pioneer immigrants as the land of promise. The term *Sonyea*, the name of the old Indian village on the site of which the colony is founded, signifies in the Indian language a "warm or sunny place." This fair domain for the helpless, homeless beings to whom the State has extended a gentle, ministering hand lies on the west side of the valley, the surface in the southern portion rolling gently to the east, and in the northern part extending into alluvial bottom-lands. The situation seems admirably adapted



CASHAQUA CREEK (CRAIG COLONY).

by nature for the humane purpose to which it is devoted through the wise benevolence of a great commonwealth.

Through the centre of the tract, dividing it into two about equal portions, flows the Cashaqua¹ Creek—a stream of sufficient volume to create a good water-power, with a fall of about 105 feet within the boundaries of the colony. It descends from the hills through a rocky and picturesque gorge. Another small stream fed by springs flows through the property on the west side of the creek.

The sides of the valley rise gradually on either side, and in the distance hills are seen which are often white with snow in the spring and fall when the fields and meadows of Sonyea are fresh and green. The landscape is exceedingly attractive, and the eye is charmed as one surveys from an elevated position the large orchards comprising every variety of fruit grown in this climate, the extensive and highly productive gardens, the herds of cattle, the sheep grazing in the pastures, the cultivated fields, broad meadows, groups of patriarchal trees, and Arcadian vistas stretching on and on beyond the boundary of the colony to the dim line of the horizon. About six hundred acres of the estate are still covered with original forest, which is looked to as a source of supply in the development of future industries. The colony is further favored in the variety of its soil—about one quarter being a rich alluvial deposit, about three eighths having an admixture of clay, and the remainder being of a quality well adapted to market-gardening purposes, and to the cultivation of peaches, pears, cherries, apricots, apples, etc.

The colony is situated about three miles from Mount Morris, a pleasant village containing about two thousand

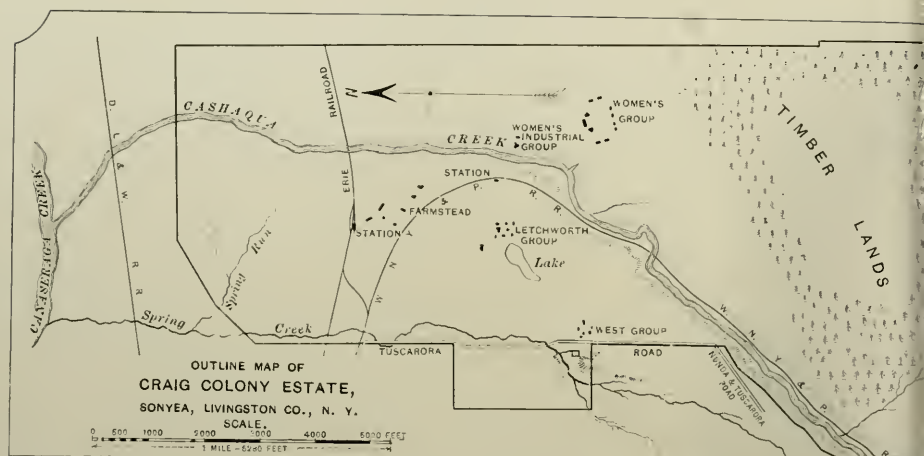
¹ This word is spelled by different authorities Cashaqua, Kashaqua, and Kishaqua. Its Indian signification is "loving stream."

five hundred inhabitants—far enough from its temptations and activities to afford the needed seclusion and quiet essential to such a colony, and at the same time near enough to be in touch with its markets, business interests, and social life. The colony is about sixty-eight miles from Buffalo and thirty-nine from Rochester, and may be reached by the Erie Railway and by the Western New York and Pennsylvania Railway, which runs in a general direction north and south and has connections with the trunk lines running east and west through the State. The latter road has recently erected an attractive station on the creek and near the centre of the tract, and a station in rustic style has recently been built by the Erie Railway Company within the boundaries of the colony estate.

At the time the State was so fortunate as to come into possession of this valuable property there were thirty buildings of various kinds upon it. These were mostly in two groups, called by the Shakers East House and West House. There were some shops and a large saw-, planing-, and grist-mill on the creek, some large barns here and there, and a few remote and scattered residences for hired farm workmen and their families. In an examination made of the buildings by the writer with a competent architect before the acquisition of the property, their value was estimated in round figures at \$75,000.

In the East group, now occupied by women, is a massive building called the Letchworth House. It is strongly constructed of excellent brick made on the place. To this has been added a broad veranda, which has pleasant outlooks upon the park in front of it. This substantial structure is now used principally for dormitory purposes, the rooms averaging about six beds each. Its capacity is for 130 female patients. On the first floor is a large and pleasant





WOMEN'S GROUP.

- 1 Administration Building.
- 2, 3 Children's Dormitories.
- 4 - 11 Adult Patients.

FARMSTEAD

- 1 Cow Barn.
- 2 Hen House.
- 3 Root Cellar.
- 4 Stable.
- 5 Farmer's House.
- 6 Granary.
- 7 Wagon Shed.
- 8, 9 Patients' Houses.

LETCHWORTH GROUP.

- 1 Letchworth House.
- 2 Hospital.
- 3 Administration Building.
- 4 Patients' Dormitory.
- 5 Dining Hall.
- 6 Steward's House.
- 7 Laundry.
- 8 Store House.
- 9 Ice House.
- 10 Laboratory.
- 11 School House.
- 12 Superintendent's House.

WEST GROUP.

- 1 Patients' Building
- 2 Kitchen.
- 3 Heating Plant.
- 4 Industries.
- 5 Cow Barn.



CRAIG COLONY,
SONYEA, N. Y.

PRELIMINARY PLAN.

SCALE OF FEET.

0 100 200 300 400 500 1000

Finished Buildings shown thus: 

Proposed Buildings shown thus: 



room, with a spacious open fireplace, used as a sitting-room, a library, and a reading-room. In this building are shower-baths, and on each floor are bath-tubs, closets, and lavatories. In the basement is located the hot-water heating apparatus that serves to heat most of the buildings of the East group.

At the rear of the Letchworth House is a one-story brick structure, which contains a dining-room for patients, a dining-room adjoining for nurses, a kitchen supplied with all modern appliances, and a bakery, cold-storage rooms, etc. This building is now called The Inn.

A few rods to the right of the first-named building is a large two-story wooden structure called The House of the Elders, having retained the name given it by the Shakers, by whom it was used for their peculiar worship. The upper floor is now devoted to dormitory purposes and the lower floor is used as an assembly-room, which is available for religious services, lectures, and entertainments. It seats about 260 persons. Religious services are held here every Sunday, and are conducted by Presbyterian, Methodist, Baptist, and Episcopal clergymen, and a Roman Catholic priest, in rotation. A large glazed solarium extending along one side of the building has been added by the managers.

A little farther on in the same direction stands a recently erected two-story brick building accommodating twenty boys. In consideration of the long association of Dr. Charles S. Hoyt with the State Board of Charities and his faithful public service, this building has been named by the managers Hoyt Cottage.

A little rearward of the House of the Elders is a plain two-story cottage, to which a veranda has been added. It is occupied by fifteen female patients, and is called Tall Chief Cottage, after an Indian chief whose name is histori-

cally associated with this locality. But a few rods from Tall Chief Cottage is The Elms, a two-story building temporarily used for a laundry, an ironing-room, and a sewing-room. It has all the modern appliances for laundering, and, with its busy and apparently cheerful workers, makes a pleasant impression upon the visitor. Near at hand is the little Shaker schoolhouse, with the same quaint desks that were used by this sedate and circumspect people.

In this group is also the orderly storehouse of the colony. Here a ledger account is kept of all kinds of supplies, showing the amount received and the amount given out on requisition. The account is written up so as to show at any time the quantity of each article on hand. A short distance from this is the icehouse, with a capacity for 311 tons. It is supplied with ice from the small lake, fed by springs, which is close by this group. Within the icehouse is a cold-storage chamber for meats, with a capacity for 14,000 pounds, and a second one for butter and other perishable articles. Belonging to this group is also a cottage which has been converted into a pleasant temporary residence for the Superintendent. All the buildings stand on a rising piece of ground but a few minutes' walk from the railway stations.

There has been added to this group the administration building of the colony, a large and imposing brick structure. On the first floor of this building are the Board room, library, Superintendent's office, and departments for the steward, bookkeeper, and stenographer. A dining-room, with a kitchen adjoining, is provided for the use of the officers. The spacious reception-hall is lighted by skylights. All the medical records are kept in a fire-proof vault in this building. The physicians meet at a certain hour each day to write up the records and give such information as may be required



CRAIG COLONY.

VIEW OF MAIN GROUP OF BUILDINGS.

concerning the patients. On the second floor are eleven bedrooms averaging sixteen feet square for the use of officers and employees. These include assistant physicians, the bookkeeper, storekeeper, stenographer, typewriters, and ushers. The capacious attic is given up to storerooms and accommodations for the night-nurses and night-watchman.

Within a stone's throw westerly is the Peterson Hospital for the treatment of acute medical and surgical cases. It was opened in January, 1898, and occupies a commanding site. It is a two-story brick building with bluestone trimmings, and is built so as to secure plenty of light and sunshine. It cost \$25,000, and accommodates twenty-six patients. The per capita expense for the resident inmates was a little less than \$1000. To the right of the entrance is a spacious office for the use of the assistant medical staff, in the rear of which, with an intervening corridor, are the living-apartments of the resident medical officer. On the left are the physical-examination room, a dark room for photographic purposes, toilet-room, etc. Communicating with a lateral corridor from the main hall are the dispensary and drugroom, patients' waiting-room, and druggist's bedroom. The kitchen is situated at the extremity of the main hall. On the second floor, at the right, are two rooms for cases requiring isolation, a ward for five or six female patients, a pleasant convalescents' room, bathroom, closets, lavatory, and wardrobe. The floor space at the left, which is occupied by men, is a counterpart of that at the right. Over the main hall is the operating-room. A dining-hall for patients and attendants occupies the space above the kitchen.

This building will always be more than a simple hospital. It has provision on the first floor for an outdoor department similar to that found in the general hospitals in the

great cities. Embracing, as the colony does, a large number of separate households, the dispensing of medicine is more difficult than it would be in a congregate institution. Medicines are given out to supervisors upon the recorded prescriptions of a medical officer at a certain hour each day, and are taken by the supervisors to their several departments, where they are kept in a locked cabinet accessible only to the visiting physician, the supervisor, and the head nurse. Under no circumstances are patients allowed to keep drugs, stimulants, or a remedy of any kind in their possession except by express permission of the physician in charge; nor is any new line of treatment or experiment permitted except with the knowledge of the medical superintendent of the colony.

In the waiting-room of the hospital patients congregate for examination by the physicians, and for advice. Female patients are given two hours each morning and male patients two hours in the afternoon. From the waiting-room they go into the physical-examination and consulting room. Here minor wounds are dressed, and injuries caused by accidents receive careful attention. These rooms are always in charge of a trained nurse during the hours they are in use.

It is eminently fitting that this building, devoted to hospital purposes, should have been named after one who, through years of persistent effort and large personal sacrifice, did so much towards establishing the first real agricultural colony for epileptics in America.

From plans prepared by the architect, working in conjunction with the President and the Superintendent of the colony, a laboratory with mortuary has been built of stone and brick, near the hospital, at a cost of \$3000 for the structure and \$1500 for apparatus and furnishing. The building



PETERSON HOSPITAL.

INDUSTRIAL BUILDING.

TALL CHIEF COTTAGE.

LEITCHWORTH HOUSE.

HOUSE OF THE ELDERS.

CRAIG COLONY.

REAR VIEW OF MAIN GROUP OF BUILDINGS.

embraces a well-lighted basement for holding autopsies, and a room for the temporary preservation of bodies. The laboratory proper is on the floor above, in two large separate rooms completely furnished and equipped with all modern scientific instruments for the prosecution of laboratory work. From a scientific point of view, this department will be of great value in the study of epilepsy. It is hoped that by this means much may be learned concerning the causes of epilepsy as well as the results of the disease. It will be a physiological and chemical laboratory as well as a pathological one. Dr. Ira Van Gieson, of New York, has been appointed consulting pathologist, and Dr. C. A. Herter, of New York, consulting pathological chemist.

The West group is situated about half a mile westerly from the East group, and consists of one capacious wooden structure, four smaller buildings, and a large heavy-timbered barn standing a little apart. The first-named building has been fitted up with sitting-rooms, dormitories, lavatories, and bathrooms to accommodate about seventy-five patients. There are nine single rooms for private patients. The dormitories are comfortably furnished. The bedsteads have woven-wire springs, and are supplied with mattresses made at the colony. There are rugs on the floors and pictures on the walls. One of the buildings is used for a dining-hall, with kitchen adjoining and officers' rooms above. The interior finish is of Georgia pine. The table furniture is tasteful, and the chairs are rendered noiseless by covering the feet with rubber. Nine sit at each table. The large kitchen is a model of neatness and convenience. Another of the buildings has an assembly-room on the lower floor and rooms above fitted up for patients; another, the smallest, is for the accommodation of officers; and the other is used at present for printing, shoemaking, mattress-work,

harness-making, and other trades. Aside from the workshop, the cost of converting these buildings into their present uses and furnishing them was effected at a per capita outlay of \$150. They are heated by hot water and lighted by electricity. Cement walks are laid between the different buildings in this group as well as between those of the East group. Slate roofs have been laid on most of the old buildings of the colony.

About a quarter of a mile from the West group the managers have built two cottages for employees who have families.

One of the two immense barns of the Shakers, removed to a more convenient and central situation near the creek, is the most prominent object in the farmstead group. The barn has been remodelled, and a basement added, which provides for stalling 116 head of cattle. New buildings have been erected, including a granary, root-cellar, hennery, slaughter-house, piggery, and a modern stable with a range of sheds attached. The stable accommodates twenty-six horses. There are also three new cottage residences in this group, one of which is occupied by the head farmer.

There has been erected, near the station, a two-story brick building for industrial purposes. A corridor 25 x 25 feet connects two wings each 25 x 75 feet. The building includes a general repair shop, carpenter's shop, blacksmith's shop, upholstering-rooms, printing-office, and a sloyd room. It has accommodations for forty workmen. It is supplied with electrical power from the power-house. The latter has a steam-engine of 80-horse power and a dynamo capacity for supplying 1040 electric lights. Bituminous coal is used in generating steam. The location of the power-house is central and supplies the needs of the whole colony.



ADMINISTRATION BUILDING (CRAIG COLONY).



PETERSON HOSPITAL (CRAIG COLONY).

Convenient to the industrial building a couple of two-story brick structures have been erected, each accommodating thirty-two patients. Downstairs are the main sitting- and dining-rooms; upstairs, dormitories and smaller sitting-rooms. Suitable rooms are provided for nurses, and each building is complete in itself with the exception of facilities for laundering and bread-making.

The colony is supplied with water from two sources,—one being Cashaqua Creek, and the other hillside springs, the water from which is conducted into a small reservoir near them. A steel tower 75 feet high and 15 feet in diameter is erected on the highest ground of the colony. It contains an upright cylinder 77 feet high and 4 feet in diameter, holding 7000 gallons. The outer space holds 90,000 gallons. The inner cylinder is supplied with spring water, which is used for domestic and culinary purposes. By means of a small steam force-pump at the reservoir, water is forced into the inner cylinder of the tower, from which it flows in small pipes to the different buildings of the colony. In all the departments using spring water the pipes have faucets which permit the water to flow only under hand pressure. The outer cylinder is for creek water. At the powerhouse on Cashaqua Creek large pumps force the water through capacious pipes from the creek to the tower, whence it is distributed for fire-protection, toilet, laundry, and sewerage purposes. The capacity of the pump is 1,440,000 gallons daily. The gravity pressure is sixty pounds to the square inch, enabling a stream of water to be thrown over the highest building. By direct action of the pump the water can be forced to an elevation of 120 feet. The distribution of hydrants is such as to afford protection to every building, and a well-equipped fire department is trained to bring them into use in case of necessity. By

means of this dual system, an abundance of both pure spring water and creek water is supplied to every house in the colony. The consumption of the latter is seventy gallons a day per capita. Since the opening of the colony there has been no case of illness of any kind that could be traced to impure drinking-water.

The system of disposing of the sewage of the colony includes a trunk line from the West group to the East group and thence to filter-beds by the creek. The filter-bed at present in use covers one acre. It is intended to build along the line of the sewer between the East and West groups moderate-sized cottages on both sides of a village green or street.

Having gone over the work of the managers in renovating the old buildings of the colony, making them comfortable and healthful places of living, and shown what structures have been added since the property was purchased by the State, we may now look in the direction in which future developments are contemplated. The present water-supply system and electric plant are sufficient for the accommodation of one thousand patients; the sewerage system provides for only five hundred patients.

The pressure for admission when the colony was first opened and when it could receive but very few patients was unfavorable to the carrying out of principles which it was intended should govern it. Proper classification could not be observed; there was too much of institutional crowding; the households were too few,—all tending to a generally disturbed condition. Perhaps most regrettable of all were the commingling of children and adults and incomplete separation of the sexes. These conditions have been overcome as far as legislative appropriations would admit, but much remains to be done to perfect the system contemplated.



LETCHWORTH HOUSE (CRAIG COLONY).



HOYT COTTAGE (CRAIG COLONY).

To meet the earnest desire of the managers to remove all the women and children to the east side of Cashagua Creek, an appropriation of \$100,000 was made by the Legislature of 1898 for a group of eleven buildings, which are about completed. They are planned to accommodate 258 patients and are estimated to cost, including plumbing, and heating and lighting facilities, ready for furniture, \$387 per capita. The group as planned, for convenience in describing, may be subdivided into three groups.

Group I. contains the centre, or main, structure, numbered 1, on either side of which are buildings, numbered 2 and 3, each for forty children and their teachers and nurses. The outside dimensions of the main building are 48 x 120 feet. On the first floor is a large vestibule opening into a general hallway, from which extends to the right and the left a central corridor. To the left of the entrance are the general office, reception-room for patients' friends, drugroom for medical supplies, etc. There are also four rooms for teachers and assistant physicians, including a woman physician for this group. At the right of the hallway on entering are the matron's office and private room. Opening from the right corridor are the dining-room for officers, kitchen, and two living-rooms for domestics. On this floor are the necessary bath- and toilet-rooms, linen-closets, and pantries. On the second floor are rooms for ten of the better class of adult patients, also a large sitting-room, sewing-room, dining-room, bathroom, and closets of different kinds for the use of the patients.

It is thought that about twenty per cent. of all the patients in the colony will be under sixteen years of age, and that such patients should be specially provided for. In addition to a sitting-room, dining-room, kitchen, and associate dormitory, the two structures in this group for children have

on the first floor of each a large schoolroom, kindergarten-room, and workroom, which are thought to be necessary either in buildings in which children live, or in such close proximity to them that they may be used in all kinds of weather and by the most frail and delicate children.¹ On the second floor there are two rooms for teachers, a sewing-room, two lavatories, six bedrooms, four associate dormitories for six beds each, besides linen- and other closets. Each of the buildings is provided with a shower-bath, also a winter play- or sitting-room 12 x 44 feet. The latter is on the first floor and enclosed with glazed sash. The communication between these buildings and the central structure is by means of a cement walk, over which is a wooden trellis supported by columns of classic design. The intention is to cover this with vines.

Group II. comprises four buildings of uniform design, numbered 4, 5, 10, and 11, two of which lie to the east and two to the west and a little in the rear of Group I. The capacity of each of the four cottages is for thirty adult patients, or one hundred and twenty in all. Each building has two separate entrances, two separate sitting-rooms, and, on the second floor, separate bedrooms and small dormitories, for the purpose of extending classification. The kitchen and dining-room are in common, with a view to greater economy.

Group III. comprises four cottages, numbered 6, 7, 8, and 9, still farther in the rear of Group I. and parallel with it. These are lined from east to west, and arranged in pairs. The buildings of each pair are fifty feet apart, and the space between the pairs is one hundred feet. The cottages in both pairs are connected by covered ways. The capacity of each cottage is for twelve patients. It is the

¹ At present children are not received younger than seven years of age.



TEMPORARY RESIDENCE OF SUPERINTENDENT (CRAIG COLONY).



INDUSTRIAL BUILDING (CRAIG COLONY).



TALL CHIEF COTTAGE (CRAIG COLONY).

intention to put in these houses patients who can do most of the household work,—make their own beds, clean their own rooms, set the tables, wash dishes, and do the lighter laundry work,—everything, in fact, except working over the range in the kitchen. There will be one hired person in each household.

The cottages in this group have each a veranda twelve feet wide extending along the front of the house. At the entrance there is a vestibule opening into a broad hallway. On the first floor of these buildings are a dining-room and a sitting-room on opposite sides of the hall. Each of these rooms is provided with an open fireplace. Besides the kitchen and the pantry, there is also a room on this floor for two employees. On the second floor is a large, well-lighted hall. Opening from this hall are three large bedrooms for two beds each. There are also six single rooms for patients, besides closets, a bathroom, etc.

The stairways in all the buildings are broken by two or three broad landings. The corners of newel-posts, door-casings, mouldings, and baseboards—in fact, all the corners of woodwork—are rounded in such a manner as to permit the least possible injury to patients should they happen to fall against them. The sleeping-apartments are so planned that no bed need be placed before a window or near a heater. The buildings are lighted by electricity generated at the power-house, and heated by steam generated in a fire-proof room in the basement of the main building. Steam-pipes are carried from the main building through sewer-pipe to steam radiators in the various apartments. The radiators are fastened securely to the wall and are protected by a light screen.

The buildings have stone foundations to the water-table, thence upward to the eaves they are constructed of brick.

The roofs of the buildings are covered with tin painted the color of red tile.

It is the intention, as means are appropriated, to add other cottages to this group, making enough to provide ultimately for a female population of from eight hundred to one thousand. Besides the cottages for patients to live in, there will be an assembly-hall constructed on the east side of the creek, also a separate hospital building. The entire group of buildings on this side of the creek will be supervised by an assistant physician, under whom there will be in turn a corps of medical and other officers. Ultimately the whole colony will be in divisions, each division consisting of numerous separate households, with an assistant physician in charge of a given division.

The principle governing the development of the colony is that of perfecting an aggregation of small houses or a village of houses in which each house has its distinct kitchen service. In this way food may be served as in a private family and individual requirements more nearly met. There are now forty-one houses upon the colony estate.

An appropriation of \$7500 was made by the Legislature of 1898 to build a superintendent's residence on the west side. The site selected for it is on an elevation above Cashaqua Creek, about three minutes' walk from the administration building, and is commanding and picturesque. An appropriation of \$8000 was made at the same time for a laundry department on the east side. Both of these buildings are now completed.

The pressure for admission to the colony increases rather than diminishes. More than seven hundred applications are now on file. Many of the appeals for admission are extremely pitiful. Superintendent Spratling says: "Could I command the language of a thousand tongues, I could



BARN.

DINING HALL, KITCHEN, AND ASSEMBLY-ROOM.

CRAIG COLONY.

WEST GROUP OF BUILDINGS.

DORMITORIES AND SUPERVISOR'S RESIDENCE.

not express the earnest hopes, the anxious inquiries, the pathetic appeals that daily reach the colony pleading relief for some afflicted father, mother, or child." From Superintendents of the Poor there is a strong demand for admission to the colony of a class of aged, infirm, and demented epileptics who are in the poorhouses and almshouses, and of whom little can be expected in the way of improvement. They are a source of great care and embarrassment in county houses, where there is very indifferent provision for them. Yielding to this pressure, the managers of the colony asked of the Legislature an appropriation for two infirmary buildings,—one for forty-four women on the east side and one for an equal number of men on the west side.

It was also found necessary to ask for means to provide separately for temporarily disturbed cases who require isolation for periods lasting from twenty-four hours to a week or possibly longer. During last year there were twenty that required isolation for an aggregate period of 276 days.

In occasional visits to the colony interviews were had with its principal officers, for the purpose of more thoroughly understanding the Craig Colony system. The notes made on these occasions, with statements of the officers, are now used.

Dr. Wm. P. Spratling, Superintendent, before coming to the colony was for five years first assistant physician at the State Hospital for the Insane, Morristown, New Jersey. Having a preference for his present special work, he allowed his name to be placed on the civil-service list of competitors for Superintendent of Craig Colony. Receiving the highest mark of merit, he resigned his position at Morristown and accepted his present office. Before entering upon its duties he made a trip to Bielefeld and entered the Bethel Colony, living among its patients and studying the colony

methods for several weeks. His previous experience and his study of the Bielefeld system are of great advantage in his present labors. He holds to the maxim, *Mens sana in corpore sano* and has strong faith in the potency of pure air, exercise, and proper diet. Dr. Spratling is in the prime of life, a man of large-hearted sympathies, and full of enthusiasm in his work. Mrs. Spratling, an amiable and accomplished woman, although spending most of her time with household duties devolving upon the wife and mother, in sustaining her husband is no inconsiderable factor in the colony life. Upon her devolves the duties of social hospitality to the many visitors who go almost daily to the colony to study its methods,—a task she is eminently fitted for and which she always delightfully performs.

“Our first endeavor,” said Dr. Spratling, “is to get the patient in good bodily health. We examine his teeth, to see that he has the means of mastication. It avails little to give a patient food unless he can properly masticate and digest it. We endeavor to remove causes of indigestion and weakness, which increase the frequency of attacks. The dietetic treatment we consider as important as the medicinal. That is why we lay so much stress on the condition of the mouth.”

The patients on admission are subjected to a thorough and critical medical examination. It may be extended for several days, in the effort to obtain satisfactory evidence of the nature of the case and the cause of the malady. Blanks are sent to relatives, friends, or physicians—to any one who knows most about the patient—to be filled out and returned. From this and other sources all obtainable data are gleaned and recorded after the case has been diagnosed.

At the outset a patient is permitted to go about and make



CRAIG COLONY.

GENERAL VIEW OF WOMEN'S GROUP EAST SIDE OF CASHAQUA CREEK.

the acquaintance of other patients and of the nurses. He is afterwards employed as seems most consistent with his welfare.

The hours for meals in summer are 6 A.M., 12 M., and 6 P.M. The bulk of the food consists of cereals, fruit, milk, butter, eggs, and vegetables, which are produced on the farm. Puddings, pies, pastry, and sweetmeats are avoided. The food is carefully prepared by cooks who are required to pass a civil-service examination in practical cookery. The same care is exercised in providing a meal as in compounding a prescription. The matron supervises closely the preparation of the food. She says:

“ From the vegetable dietary cabbages and cucumbers are excluded and the supply of potatoes is limited. Soup is permitted every day, because it is nutritious, and, at the same time, serves to dull the usually keen appetite of the epileptic; but great pains is taken that it does not contain greasy or other indigestible substances. Tea, which is a favorite beverage with epileptics, is very carefully prepared. Freshly boiled water is poured over the leaves and allowed to stand from three to five minutes. The liquid is then poured from the leaves and kept hot until ready for use. Coffee, made from freshly ground berries, is mixed with beaten eggs and cold water and placed where it can come slowly to the boiling-point. It is kept just below that point for twenty minutes, then the necessary quantity of boiling water is added, and it is ready to serve. Beef, mutton, chicken, or fish is allowed but once a day. Of these, beef is most frequently served. To roast the beef it is put into a very hot oven, in order that the surface may be seared before the juices escape. After a crust is formed the oven is cooled somewhat and the meat frequently basted to prevent its drying and to distribute the heat evenly over the

surface. The bread is baked in a brick oven of the latest and most approved kind."

The patients are weighed on admission and every month thereafter. Two hundred patients weighed prior to one of my visits showed an aggregate gain of five hundred pounds. No patient had lost in weight. Strict attention to diet, with cleanliness and regular habits, reduces the number of seizures.

No two patients are amenable to precisely the same kind of medical treatment; but in all cases the aim is to build up the physical system by means of proper food, outdoor exercise, and regular habits. Some improve without any other remedy. Others may be suffering from disordered stomachs, chronic diarrhoea, or intestinal trouble, to whom it is necessary to administer drugs.

On being asked about the use of bromide of potassium, Dr. Spratling replied: "It is very much used, to the injury of the epileptic. I am convinced that it does a great deal of harm. Many come here in a condition of what we call bromism. They are stupid, dull, and seem bordering on dementia. They have no energy for work, and are perfectly listless. They are suffering in many ways from the effects of liberal doses of bromide, and the skin is highly inflamed. Foul spots are discovered all over their bodies. Among the first things we do with them is to wean them from the use of bromide. We put them under another course of treatment and try to build them up. The extent to which bromide is administered by some poorhouse-keepers is alarming. Where we give it once in three or four weeks they administer it daily. We had a man here who took forty-five grains every night for five years. The newspapers are filled with 'fit cures,' which are mostly made up of bromide of potassium in powerful solution. It palliates,



CARRERE & HASTINGS, ARCHITECTS,
NEW YORK CITY.

CRAIG COLONY.

CENTRAL BUILDING AND CHILDREN'S DORMITORIES OF WOMEN'S GROUP, EAST SIDE OF CASHAQUA CREEK.

but does not cure. It checks and weakens the attacks, but does not prevent their recurrence."

A remarkable case may be cited in this connection. It is that of a man who, at the age of twenty-eight, was admitted to the colony. He had a sunstroke when only eight years old, and ever since had been subject to frequent epileptic seizures. He was discharged from two of the State hospitals for the insane as being incurable and likely soon to die. Eminent experts of Philadelphia and of New York thought his case hopeless. It was written up in the case records as "perfectly demented." He was taken home by a sorrowing mother, as she thought, to die. It was at this time that Commissioner Foster, of the New York State Board of Charities, interested himself in the case, and had the young man sent to Craig Colony in February, 1896. The first month he had 180 seizures; the second, 113; the third, 3; the fourth, 1. After that, down to the time of his discharge, he did not have a seizure. What is no less remarkable for a man who had been considered by physicians as demented, he learned a trade. When admitted, he was described as a locksmith, but he did not appear to know a lock from a stone. He was regarded, therefore, as having no calling. Under intelligent supervision, however, he took gradually to the printer's art, and finally had full charge of the printing-office. This man had been receiving, previous to his admission to the colony, as high as 140 grains of bromide a day. His allowance was reduced to fifteen grains night and morning as soon as he reached Sonyea. This after a time was still further reduced to fifteen grains at night without any in the morning. His physical condition was so low that he could not walk without support. Pure air, sunshine, proper diet, medical supervision, and regular habits wrought in him what seems like a miracle.

This man weighed when admitted 120 pounds. At the end of a year his weight was 136 pounds. He was discharged from the colony April 27, 1898. It is reported that he has had no fits since, and that he is now earning a living for himself and his mother.

The following is a somewhat remarkable record respecting the first fifty patients admitted and their condition at the end of five months of colony life:

	FIRST MONTH.	FIFTH MONTH.
Total number of seizures.....	708	315
Average individual seizures....	14	6

After the patients have resided a few months at the colony the changed expression of their countenances is very marked. The dull, apathetic look, acquired perhaps through years of indolence and neglect, disappears. The effects of occupation, education, and intelligent treatment upon the general physical and mental development become clearly apparent. No patient is discharged as recovered until two years have elapsed from the time of his last seizure. A correspondence is maintained with every patient for two years after his discharge.

Dr. Spratling is ably assisted in the medical work by Dr. L. Pierce Clark, Assistant Physician, Dr. Marie Louise Benoît, Medical Interne, and Dr. E. A. Sharp, Medical Interne.

Before entering the service of the colony, Dr. Clark had a year's experience in the New York City Hospital, and served a similar length of time in the New York City Asylum, after which he had an experience of eighteen months in the Connecticut State Hospital for the Insane at Middletown.

Dr. Benoît is a graduate of the University of Buffalo.



COTTAGES FOR WORKING PATIENTS (CRAIG COLONY).



STEWARD'S RESIDENCE (CRAIG COLONY).



RAILWAY STATION. MEN'S INDUSTRIAL BUILDING (CRAIG COLONY).

Prior to coming to the colony she was in active practice for a year and studied about the same length of time abroad. Her knowledge of foreign languages makes her services of additional value to the colony.

The medical records of the colony are very complete and present an interesting study. Each case is duly recorded in the admission book, where the social status of the patient is noted, together with his or her status as an epileptic. The admission paper is copied into the case record book, and this entry is supplemented from time to time with notes regarding the progress of the disease and the condition of the patient. The history of the patient prior to admission is copied into the special record book. Here also are recorded such cases as are deemed of exceptional scientific interest. In the monthly record of seizures each case has a folio by itself. Yet another book contains a record of stigmata of degeneration together with hereditary ailments. Separate records set forth the daily medical treatment of each case for epilepsy, also the treatment of diseases or ailments other than epileptic.

Dr. Clark finds that the seizures are less frequent in summer than in winter, a fact which may be accounted for by the increased opportunities for outdoor employment in the summer months. On one of my visits there were fifty-six seizures in the space of twenty-four hours. At other times the number would be as low as fifteen a day.

The night-nurse attached to each household makes a careful note of each attack. Every attack occurring by night or by day is duly observed and reported. Every patient on parole, visiting friends, is carefully instructed as to diet, exercise, and the use of medicine, a supply of which is allowed to each, so that the medical treatment may be continuous. For the use of patients who go away from the

colony for a few days there is given what is called a "record card," the purpose of which is: first, to preserve a record of all seizures and their kind, whether by night or day, mild or severe, and whether attended with dizzy spells,—all of which conditions are indicated by characters; second, to serve as a guide as to what to eat and what not to eat; third, as a means of identification if the patient has a seizure in a strange place. Included in the list of foods not to eat are pastry and cake of all kinds, rich puddings, pork, veal, ham, or anything fried in grease, or any food highly seasoned. The use of alcoholic beverages of all kinds is forbidden. Coffee may be drunk for breakfast, but not for supper if it causes wakefulness. Weak tea may be used sparingly. Patients are enjoined to eat slowly and masticate thoroughly.

The supervision of the matron of the colony, Miss Elizabeth D. Holt, not only includes the duties usually belonging to that office, but extends, through her philanthropic spirit, to the mental, moral, and physical development of the women and children patients. The true devotional spirit which has worked such wonders at Bielefeld, and without which it is to be feared only a modicum of success is likely to attend these humanitarian undertakings, is everywhere apparent in the supervision of the domestic affairs of Craig Colony. Rare gifts of nature, supplemented by a two years' course in the New York City Hospital and a special course in domestic science in the New York Teachers College, have peculiarly fitted Miss Holt for her difficult and patience-trying duties. When we called at her office, she was found seated in front of a small table surrounded by ten girls whose ages ranged from twelve to fifteen years. They were clean, quiet, well-behaved, neatly clad children. Their faces wore a cheerful look. Their hair was neatly



CRAIG COLONY.
FARMSTEAD GROUP.

combed and tied with different-colored ribbons. It was evident the matron and her pupils were on familiar terms, but not too familiar to interfere with discipline. The teacher's love seemed to be reciprocated. What a contrast with the old poorhouse life!

"This is not school," Miss Holt hastened to say upon our unexpected entrance, "but merely a little gathering of the children here in my office. This afternoon they have been cutting out pictures and learning how to paste them neatly into a scrap-book. They learn in this way the use of a pair of scissors and are at the same time trained to observe carefully, so as not to spoil the pictures. The eye and hand are trained simultaneously. At other times they learn to set the table by means of toy dishes; also how to wait on the table. We have a sort of kitchen-garden, including lessons in sweeping and bed-making. The children also learn how to braid hair, using threads of worsted for this purpose. Lessons on deportment are also included. Classes are formed in sewing, mending, darning, and rug-making, in gymnastics, marching, and walking, together with weaving and basket-making. There are object-lessons for the feeble-minded. They are taught to observe and handle the most common, every-day objects, as many of the children are ignorant of the names and uses of such articles. It is just such practical, simple things that I try to teach." It was a very pretty picture. The quiet maintained was particularly noticeable. Not a sound of discord. All seemed intent on simple tasks, so skilfully directed as to be made deeply interesting as well as instructive.

In reply to a question about the nurses, Dr. Spratling said:

"We take people of middle age, who are strong physically and sound mentally. Sometimes it requires a good

deal of strength on the part of both male and female nurses to care for the patients during violent seizures, when they are likely to injure themselves. In the second place, we try to get persons who are kind, able to exercise a good deal of patience and forbearance, and, above all things, to control their own tempers. The reason for this is that epileptics, as a rule, are so irritable and so trying to the patience of others that it requires a saintly disposition to bear with them. Having selected promising candidates, we have a civil-service examination in rudimentary branches, so as to test their ability to keep the records. Our local board of civil-service examiners consists of the first and second assistant physicians and the matron. The doctors examine them with a view to the proper care of epileptics, and the matron questions them upon methods and details of housekeeping. After they pass the examination they are appointed for a probationary period of three months, and if they are incapable of meeting our requirements, we can dismiss them at any time. The compensation ranges from \$16 to \$26 a month for women, and \$18 to \$28 a month for men."

There are three kinds of nurses, namely, trained, house, and labor nurses. The first are engaged principally in the hospital caring for acute medical and surgical cases. As in the United States Army hospitals, female nurses are preferred who are willing to assume the care of male patients. House nurses are occupied in the care and supervision of households made up of from twelve to thirty patients. It is their duty to see that cleanliness and order are observed in all matters of housekeeping, and that patients who are obliged to remain indoors are properly cared for. It is the duty of the labor nurses to accompany the patients when they are required to go to the fields, gardens, or shops, and work with them while instructing them. This is the method



COTTAGES FOR OFFICERS. WATER-TOWER (CRAIG COLONY).



PATIENTS HOEING CORN (CRAIG COLONY).



GARDEN AND LAKE (CRAIG COLONY).

pursued at the Bethel Colony, where the nurses not only work with their charges, but eat at the same tables and sleep in the same dormitories with them; truly a high degree of self-sacrifice, and devotion to humanitarian work.

The general ratio is one nurse to ten patients. There is one night-nurse in charge of a building or small group of patients, with one patient who acts as assistant night-nurse.

The training of nurses to care for epileptics differs little from that of other hospital nurses. They are taught the principles of first aid to the injured, so as to be able to act promptly and intelligently in case of accident. They must be able to treat minor injuries by applying a bandage or stanching a wound. They must know all that the trained hospital nurse is required to know about bedside work, taking temperatures, noting the respiration, pulse, etc. The women nurses must in addition be able to cook for their charges. They must know how in case of sickness to make toast, beef-tea, and other delicacies. Cookery is an important branch of the Training School for Nurses, which the women are required to attend three hours every week.

"In selecting the men," said Dr. Spratling, "we prefer farmers' sons of twenty-four or twenty-five years, whose characters are pretty well formed and who have received a good industrial education. We prefer young men who know but little of city life, and who have not acquired habits of dissipation."

By the advice and authority of the Attorney-General, a uniformed officer, empowered to make arrests, is on duty during the day, for the better preservation of discipline and order. There are also night-patrols.

How to occupy the mind and at the same time provide suitable exercise for the body is one of the most interesting problems now being solved at Craig Colony. Superintend-

ent Spratling believes in alternating the physical and mental exercises. "Otherwise," he says, "there would be a tendency to atrophy of mind or body, whichever happened to be neglected." A co-equal development of both is what is aimed at. With this object in view the day's routine is agreeably diversified, physical labor for not too long a period being followed by mental training and amusement.

The industrial principles of the colony are emphasized as of great importance, while the evils of "all work and no play" are carefully avoided. "We have demonstrated conclusively the great value of work in the treatment of epilepsy," said Dr. Spratling. "The connection between frequency of seizures and no work has been so clearly shown that we insist on every patient doing something. On rainy days or in extremely cold weather, when patients are indoors and idle, the attacks are doubled in frequency. They become cross and irritable. At such times they are more liable to fits, and every seizure tends to retard their chances of cure. Outdoor employment is important above everything else. After a man has exercised out-of-doors he comes in with a healthy appetite for his food, and is able to digest what he eats. When he retires with his system charged with ozone and rests comfortably, nature, instead of drugs, acts the part of a restorer. We favor almost anything that will induce the patients to sleep well."

Most of the men work six hours a day on the farm, in the garden, or taking care of stock. The women, too, go out in groups to work in the garden in summer, always in charge of nurses.

Aside from the occupations connected with farming the men are engaged in printing, shoemaking, tailoring, blacksmithing, harness-making, and other industries. The engineer and the fireman at the power-house have each two



PATIENTS DIGGING POTATOES (CRAIG COLONY).



PATIENTS CLEARING LAND (CRAIG COLONY).



EIGHT EPILEPTIC CARPENTERS BUILDING A HOUSE (CRAIG COLONY).
ALL GRADUATES OF THE C. C. SLOYD SCHOOL.

patients assisting them. Two patients, who are blacksmiths and skilled workers in iron, do all the horseshoeing for the colony, besides repairing wagons, etc. All the job printing of the colony is done by the patients. During winter some of the men are employed clearing land and cutting brush-wood, with a view to beautifying the grounds and preparing wood for kindling. In the not distant future it is anticipated that the shoeshop will furnish all the shoes required for the colony, and that patients will be able, under proper supervision, not only to erect the kind of structures most desirable for the colony life, but also to manufacture all the necessary interior furniture. Nature has furnished on the grounds an abundance of material for brick and for timber.

Many of the women are employed in sewing, crocheting, and embroidering. Once a year an exhibition of their needlework is given in their assembly-room. This serves to stimulate them to take pride in their work. Dr. Spratling says: "Many epileptics are peculiarly inconstant. By virtue of the disorganizing and disintegrating powers of their disease, it is extremely difficult for them to acquire any useful habit. They like to change from one thing to another. Much coaching and constant supervision are necessary. The patient who has led an almshouse life knows at least something of what discipline means,—knows he can go so far and no farther. Boys and girls who have led a spoiled life at home are less amenable to colony discipline; on the other hand, they have more commendable pride and more self-respect than those who have become institutionized. The spiritless condition of those who have resided a long time in the great city almshouses of New York and Brooklyn is pitiable to behold. They seem to be mere human machines. Speak to them, and they respond with hanging heads and stupid stare. They look as if all spirit had been

crushed out of them. It is difficult to induce patients who have acquired the almshouse antipathy to work to take kindly to any form of employment ; but during twelve months this aversion is gradually dissipated. Men and women who formerly shirked work now take cheerfully and naturally to six or seven hours a day. The example of the nurses working with the patients and performing an equal amount of labor seems to have a healthy moral influence in bringing about this result."

On the occasion of a visit made to the colony July 20, 1898, the patients were employed as follows:

Of the men, 20 were employed on the farm, 8 on the lawn, 23 in the garden, 16 at housework, 2 at painting, 2 in the power-house, 2 were assisting the fireman, 2 were employed at carpentry, 2 as messengers, 2 in the storeroom, 2 at surveying, 1 at tailoring, 2 in the blacksmith's shop, 2 in the laundry, 2 in the horse-barn, 2 in the cow-barn, 1 in the bakery, 5 in the kitchens, 3 in the scullery, 4 in the dining-room, 1 as assistant night-nurse, 1 in the clothes-room, 1 in the printing-office, 1 in the hennery, 1 at the filter-bed, and 1 as porter. Seventeen men were working in the brickyard, producing, under the supervision of experienced workmen, 12,000 brick a day. Seventy-six per cent. of the male patients were engaged in useful labor, to which seven or eight hours of the day were devoted. The market value of their labor was about \$30 a day.

Of the women, 9 were employed in the laundry, 18 in the sewing-room, 11 in the dining-room, 11 in the kitchen, 14 in the scullery, 35 at housework, 1 in the storeroom, 1 in the clothes-room, 2 as messengers, 2 on the lawn, and 25 in the garden. Eighty per cent. of the women were usefully employed.

Twelve boys from ten to fifteen years of age were in



PATIENTS GATHERING APPLES (CRAIG COLONY).



PATIENTS MAKING BRICK (CRAIG COLONY).



SLOYD SCHOOL FOR BOYS (CRAIG COLONY).

charge of an attendant, who, under the direction of a professional gardener, instructed them in gardening during the forenoon. In the afternoon the boys attend school.

Much pains is taken to prevent the possibility of accidents to patients in their varied occupations, and a watchful supervision is exercised over them by night and by day. A portable mattress with a pillow attached is taken to the field by laborers, to be used in case of seizures, and stretchers are always at hand to carry the helpless in a decent and orderly manner.

Under the supervision of Farmer Kingston, who was manager for the Shaker community, the farm yielded in 1897 about three thousand bushels of wheat, averaging from twenty-eight to thirty-eight bushels to the acre, and several thousand bushels of potatoes, at the rate of from one hundred and fifty to three hundred bushels to the acre. Corn yielded at the rate of one hundred bushels in the ear to the acre. There was an enormous yield of sugar-beets, and as several hundred acres are specially adapted to their growth, the sugar-beet industry is looked to as a possible source of revenue. The yield of fruit from forty acres of orchard was also large. The Superintendent reports that the total value of the farm and garden products of the colony for the first year of its operations was \$14,230.20, and for the second year \$25,810.08. During the year ending September 30, 1898, the products of the farm and the various departments of the colony amounted to \$36,889.03. There is slaughtered at the colony all the beef that is used, and all the mutton consumed is produced upon the colony farm.

In the last two years the farm has been greatly developed. The flock of sheep has grown from eighty to three hundred, besides those that have been used as food for the colony. It is hoped in time to perfect the industrial depart-

ment so as to manufacture cloth from wool grown on the place. In utilizing the extensive range of pasture young cattle are purchased, and the increase in value from their growth becomes a source of revenue to the colony.

The programme of amusements is as diverse as that of labor. The women while away a pleasant hour at innocent games, and entertainments which please the patients and arouse the mental faculties are frequently provided. There is dancing in the assembly-room once a week. Stereopticon lectures in winter have proved very interesting.

To no one department is more attention given than that of providing amusements which call into play bodily exercise and muscular activity, but the system of recreation is not yet perfected on account of the newness of the colony and a lack of means to carry out the plan in view. The theory that the stronger you make a man's muscles the stronger you make his brain was put in practice by the Superintendent, and the result has not been disappointing. A field containing about five acres of ground is devoted to athletic sports, military drill, and games requiring agility and expertness. Within the outer limits of the grounds is a half-mile bicycle and foot-race track. The interior green-sward space is used for baseball, lawn-tennis, and croquet grounds. Dressing- and toilet-rooms and accommodation for seating spectators are here provided.

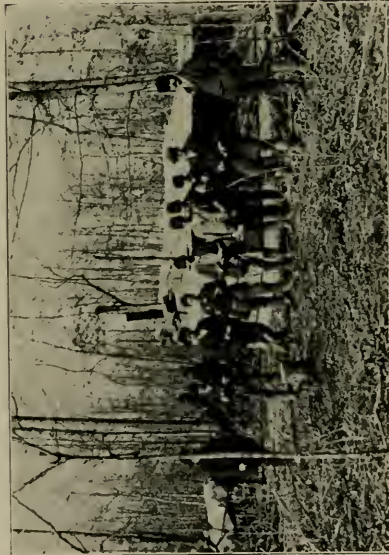
The entire system of recreation and amusements is under the direction of a physician, and his instructions are given to a supervisor, who is always on the ground when the patients are exercising to see that the physician's directions are carried out. A feeble patient, especially one with weak heart and lungs, is not allowed to go through violent exercise. Only those patients whose muscles have been gradually developed by physical training are permitted to indulge



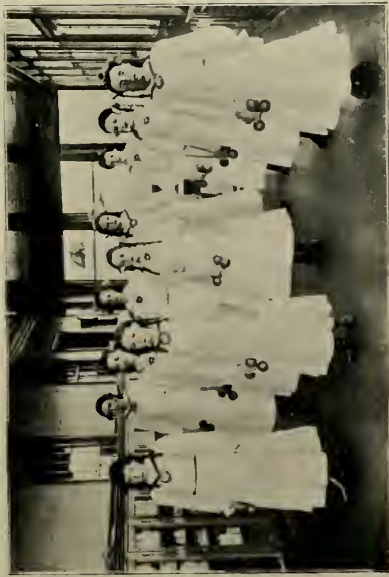
PATIENTS MAKING STRAW MATS.



SLOYD SCHOOL FOR GIRLS.



PATIENTS IN LUMBER CAMP.



DUMB-BELL DRILL.

CRAIG COLONY.

in extraordinary feats. Those boys who have made a record in vaulting have been gradually trained to their present degree of proficiency. It is said that it is an extremely rare occurrence for a patient to have a seizure on the athletic grounds, and in no instance have the exercises proved detrimental.

The managers desire to secure a legislative appropriation for a gymnasium, a bowling-alley, and a billiard-room, which are especially needed during the winter months. The legal holidays are observed by appropriate exercises and entertainments. The Fourth of July is made an occasion of especial interest. Music, parades, athletic sports, and evening illuminations are included in the programme. The patients enjoy a half-holiday Wednesdays and Saturdays during July and August. Sunday is of course always a day of rest. The assembly-hall is used for religious services Sunday and for lectures and entertainments during the week. The circulating library, which includes the best magazine literature of the day, is a popular feature of the colony.

A love of flowers and the cultivation of them are encouraged among the patients. A floral reception given by Mrs. Spratling soon after the colony opened resulted in donations of some two hundred potted plants, which were cared for by the patients.

One of the principal objects of the colony is to provide schools for children who, by the nature of their disease, are, like their elders, debarred from association with their more fortunate fellow-mortals. "The greatest work this colony will ever do," said Superintendent Spratling, "will be with the young epileptic."

The school for women and children is in charge of Miss E. Luella Coffin, who has had previous experience in the instruction of defective children, and is well qualified for her

responsible position. The education of these unfortunate persons appeals so forcibly to the feminine nature that many regard it as peculiarly woman's work. Certain it is that women are naturally quicker than men to discern that wisdom in simplicity which never fails to captivate the child heart, and which is best calculated to set in motion the child mind. It must be remembered, too, that many adult epileptics are mentally children, and that their lessons are necessarily simple and practical. The same lessons, therefore, that are taught the boy and girl of ten are taught many of the adult patients. To be able to write a letter or address an envelope is a common ambition. The younger pupils seem to enjoy the drawing lessons. The school opens at 9 A.M. for the girls, and remains in session until 11.30. There is an afternoon session for the boys.

In addition to the day-school, a night-school has been organized for adults. Lectures given from time to time by the teachers are very helpful. Calisthenics and military drill are also features of the colony life. The summer walks in the garden and through the fields are made a means of instruction as well as pleasure, the teachers upon these occasions striving to instil into the minds of the patients a knowledge of the plant and animal life by which they are surrounded, thus leading them to see

“Tongues in trees, books in the running brooks,
Sermons in stones, and good in everything.”

The school records show what progress has been made from month to month by individual pupils in school exercises. Dr. Clark is firmly convinced that the education of the epileptic child should proceed on very different lines from the education of the feeble-minded. He finds frequent epileptic seizures and attendant mental weakness accom-



SENECA INDIAN GIRL (PATIENT) IN COSTUME FOR EVENING ENTERTAINMENT
(CRAIG COLONY).



PATIENTS DANCING AT ENTERTAINMENT (CRAIG COLONY).

panied by impairment of memory. When the seizures become less frequent the power of memory returns sufficiently to enable the patient to derive more or less benefit from educational training. At other times the patient lacks all power of concentration and has little or no capacity for receiving the ideas sought to be conveyed. The aim of the teacher is to catch the pupil when his or her mind is in a condition to assimilate the knowledge sought to be imparted. The bright pupils are selected for special attention.

A sloyd school constitutes one of the departments of the industrial building. It is under the direction of Augustus T. Hatch, a graduate of Bowdoin College and of the Sloyd Training School of Boston. The present class consists of twenty boys. About half of them will soon graduate, when they will be engaged in carpentering, cabinet-work, and in making repairs about the institution. The aim is to teach them a trade and develop them intellectually. It is intended in time to teach other trades, including blacksmithing and masonry.

A class of sixteen girls also receives instruction in manual training. Their work, including whittling, is much lighter than that done by the boys. There are also classes in basket-weaving, sewing, etc.

The heating, lighting, and sewerage systems of the colony have proved satisfactory. The general healthfulness of the place corroborates the affidavit of Deacon Work, one of the Shaker community, made previous to the purchase of the site. Deacon Work declared that during the twenty-five years the property had been occupied by the Shakers, with an average population of one hundred persons, there had been no case of malaria, typhoid or other fever, and but one case of pulmonary trouble—that of a

young woman who died of consumption from which she was suffering when brought to the community. Of the twenty-three persons who died at the colony during the period named, four were between the ages of sixty and seventy, three between seventy and seventy-five, four between seventy-five and eighty, five between eighty and eighty-five, and four between eighty-five and eighty-seven.

On the third anniversary of the opening of the colony, January 27, 1899, it contained 353 patients, of whom 163 were males and 190 were females. Of the female cases, 33 were girls under sixteen years of age, and of the male cases, 20 were boys under sixteen years of age. These figures include 6 male patients and 9 female patients in the hospital. The number admitted to the colony between its opening, January 27, 1896, and January 27, 1899, was 455, of whom 232 were males and 223 were females. During this period there were discharged 102, as follows:

Recovered.....	7
Improved	40
Unimproved.....	17
Insane.....	12
Died.....	26

The 12 insane patients, 4 of whom were insane when they entered the colony, were transferred to the State hospitals in the districts from which they were committed to the colony.

The present capacity of the institution is for 360 patients. When the new group of buildings for women and children is completed it will accommodate 620 patients.

The total amount appropriated for improvements previous to 1899, including the appropriations for the water-supply and sewerage systems, was \$425,000.

Aside from maintenance, the Legislature of 1899 appropri-

ated for improvements \$105,000. This sum includes \$65,000 to be expended in erecting buildings for patients, two cottages for employees, a warehouse with facilities for the cold storage of provisions and for baking ; in making an extension to the industrial building and its machinery, also to the sewerage plant ; and in improving the grounds.

In establishing the colony there has been expended not a little self-sacrificing effort by many whose names do not appear in these pages. Among them, and deserving of special mention, is Mrs. Charles F. Wadsworth, chairman of the first executive committee.

Considering the advantages possessed by the colony for accomplishing the object for which it was founded,—advantages which include a large tract of fertile land, a healthful situation in a temperate climate, an abundant water-supply, numerous comfortable dwellings of moderate size in widely distributed groups, the substructure of wise statutes by which it is operated, and the liberal spirit in which the people have met the demands for its improvement,—it may not be regarded as an optimistic view to see in its future development a grand and beneficent charity.

CHAPTER IV.

MASSACHUSETTS, NEW JERSEY, TEXAS.

MASSACHUSETTS.

IN Massachusetts, as in Ohio and New York, the establishment of a State institution for epileptics was preceded by an earnest effort of benevolent persons in their behalf. In December, 1890, Dr. William N. Bullard read before a section of the Massachusetts Medical Society a paper on "Provision for the Care of Adult Pauper Epileptics in Massachusetts," in which he directed attention to the total lack of proper provision for this class. The following is an excerpt from Dr. Bullard's able paper:

"Out of the many thousand pauper patients who, in the course of a year, seek treatment in our large hospitals and charitable medical institutions, there is no class for whose proper care and protection the means at our disposal are so utterly inadequate as for adult pauper epileptics. Beyond certain mild palliative therapeutic measures, we have no resource until the patients become fit subjects to be legally committed to institutions for the insane. The only exceptions are those cases where surgical interference is deemed desirable. In the whole range of medical practice in Massachusetts, there is no class of patients whose interests have been so thoroughly neglected.

"There is probably no considerable class of the physically or mentally afflicted which contains so large a proportion of persons demanding our deepest sympathy, or which

entails so large an amount of suffering for each person, as that comprising the chronic epileptics. They are, as a whole, much worse off than the chronic insane, worse off even than the acute insane, for the condition of the latter is but temporary. The chronic epileptic is, however, in a condition which may be described as one of recurrent insanity. The attacks are not so distressing in themselves. During them, the patient is unconscious; but the condition preceding is often one of much mental pain, and it is the constant dread of the attack, always impending, occurring at any time without notice, which causes the greatest strain. There is also the mental condition of depression and of uncontrollable fear and terror produced by the disease itself, which adds to its horrors."

Dr. Bullard was requested to bring the subject before the State Medical Society at its annual meeting. This led to the appointment of a committee by the State Society to present the matter to the Legislature and to have general charge of the project for securing State provision for epileptics.

In February, 1892, the Governor of Massachusetts sent the following message to the Legislature:

"I herewith submit for your consideration a report made to me by an able committee of experts of the Massachusetts Medical Society, submitting in detail the reasons which, in their judgment, make it necessary for the Commonwealth to provide for the establishment of an institution for epileptics,—such institution to be in the form of cottage hospitals. This committee has been given full power to act in the matter for said society, and their recommendation, I believe, meets its approval.

"I have referred it to the State Board of Lunacy and Charity, with a request for their opinion upon it. I herewith

submit their opinion, in writing, endorsing the recommendation. In my judgment, the facts and reasons stated in this communication entitle the recommendation to your early and favorable action. I specially commend the suggestion that the hospital, if established, should be in the form of cottage hospitals."

The Legislature gave the subject some consideration, but referred it to the next General Court. In its Report to the Legislature, December 17, 1892, the Board of Lunacy and Charity directed attention to the subject in the following language:

"The matter is one that demands prompt action. The number of these unfortunates is constantly increasing among us, and, while almost every other class of the sick, the poor, and the afflicted are provided for, no special arrangement is made for adult epileptics, and their only refuge seems to be the insane hospitals, in whose crowded wards they are wholly out of place, or the town almshouses, where their only prospect is increased suffering and gradual decay. . . . It would seem wise and just that the State, always ready to relieve suffering, should take some measures for the protection and relief of its epileptics, and the Board would earnestly recommend speedy action in the matter."

The Board repeated its recommendation in its Report made December 28, 1893; and in its Report for 1894 it said:

"The Board once more earnestly recommends that the first steps be taken, without further delay, towards the establishment of a hospital for the custody and relief of epileptics. The recommendation has the unqualified endorsement of the leading physicians of the State."

Finally the Legislature passed an act, Chapter 483, Laws of 1895, establishing a special hospital for epileptics.

MASSACHUSETTS HOSPITAL FOR EPILEPTICS.

The act referred to, creating this institution, assigned to the use of the hospital all the lands, buildings, and personal property formerly belonging to the State Primary School at Monson, and appropriated \$160,000 for alterations and additions to the existing buildings and the erection of such new ones as should be deemed necessary for the accommodation of two hundred patients and the physicians and other officers and attendants who should have the care of the patients.

The government is vested in a Board of seven trustees appointed by the Governor, two of whom are women. Upon this body are conferred the same general powers as are possessed by the trustees of the State lunatic hospitals. The Board is empowered to appoint the head physician, assistant physicians, and such other officers and agents as it may deem necessary. These hold their positions at the pleasure of the Board, their salaries being subject to the approval of the Governor and his Council. The trustees receive no compensation except for expenses incurred.

In respect to the admission and support of patients the act authorizes the reception into the hospital for care and treatment of "any adult person, not a criminal, who is subject to epilepsy, provided such person be neither an idiot, an inebriate, nor violently insane."

The statutes that apply to the State lunatic hospitals regarding the commitment, detention, transfer, and discharge of insane patients are made applicable to the Hospital for Epileptics, and insane epileptics may be committed to the latter, provided they belong to the class above specified.

The act provides that "the trustees of said hospital may receive and detain therein, as a boarder and patient, any person subject to epilepsy who is desirous of submitting

himself for treatment and makes written application therefor, but whose mental condition is not such as to render it legal to grant a certificate of insanity in his case. No such person shall be detained for more than three months after having given written notice of his intention or desire to leave said hospital. When any patient is received at said hospital the superintendent shall report the particulars of the case to the State Board of Lunacy and Charity, which may investigate the same."

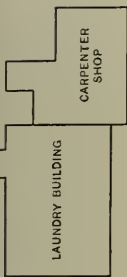
The act also provides that all epileptics of the class first named may be transferred from any lunatic hospital by the Board of Lunacy and Charity to the Massachusetts Hospital for Epileptics, "and when said Board has reason to believe that any such epileptic confined in any almshouse or other place is deprived of proper treatment or care, whether such epileptic is a public charge or otherwise, it may cause the transfer or commitment of such person to the Massachusetts Hospital for Epileptics; and said State Board shall transfer from said Hospital for Epileptics to some State lunatic hospital or asylum such inmates as may be found to be violently insane and requiring treatment therein."

The charges for the support of inmates able to pay, or such as have kindred or others bound by law to maintain them, must be paid by such inmates or such kindred or others legally beholden, at a rate determined by the trustees. The charges for the support of other patients having legal settlements in the State must be paid by the authorities of the place of settlement; and those having no legal settlement in the State are paid for by the State at the same rate as is paid for the support of city, town, and State patients in the State hospitals for the insane.

The buildings of the institution occupy a beautiful site shaded by an old growth of elms and maples. The estate

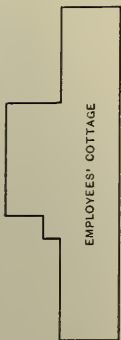


MEN'S COTTAGE



LAUNDRY BUILDING

CARPENTER
SHOP



EMPLOYEES' COTTAGE



SMALL
HOSPITAL



ADMINISTRATION
BUILDING



MASSACHUSETTS HOSPITAL FOR EPILEPTICS, AT MONSON.

KENDALL, TAYLOR & STEVENS, ARCHITECTS,
BOSTON, MASS.



WOMEN'S COTTAGE

comprises 237 acres, about one half of which is tillable. The remainder is pasture and woodland. There are about five acres of orchard.

Most of the old buildings could not be utilized for hospital purposes, and were torn down and removed. Five of the smaller ones, in addition to the barns, were preserved for future use. The boiler-house, laundry building, and carpenter's shop were converted into heating and electric-light plants, laundry, bakery, storerooms, and workshops; the larger hospital building was arranged for the accommodation of general employees, and the smaller one for patients. In addition, two hospitals and a new administration building of brick have been erected.

The administration building is 50 x 60 feet, and three stories high. The first floor is occupied by offices and other public rooms. The two upper stories provide apartments for the medical staff and some other officers.

The two hospital buildings, one for men and the other for women, are alike—two stories high, each building complete in itself, with kitchen, dining- and living-rooms. Their general shape is that of a rectangle, 50 x 125 feet, with an L 30 x 30 feet projecting from the north side at either end. In the southeast and southwest corners of each story are day-rooms, between which, on the south, are two large dormitories. On the north are two dining-rooms separated by a serving-room. In each L at the rear of the day-room are four bedrooms, and bath-, toilet-, and clothes-rooms. The second story is a counterpart of the first. The ground slopes to the north, admitting of a basement on that side, which is used for kitchen purposes. Each building is divided into four distinct sections, accommodating twenty-five patients each.

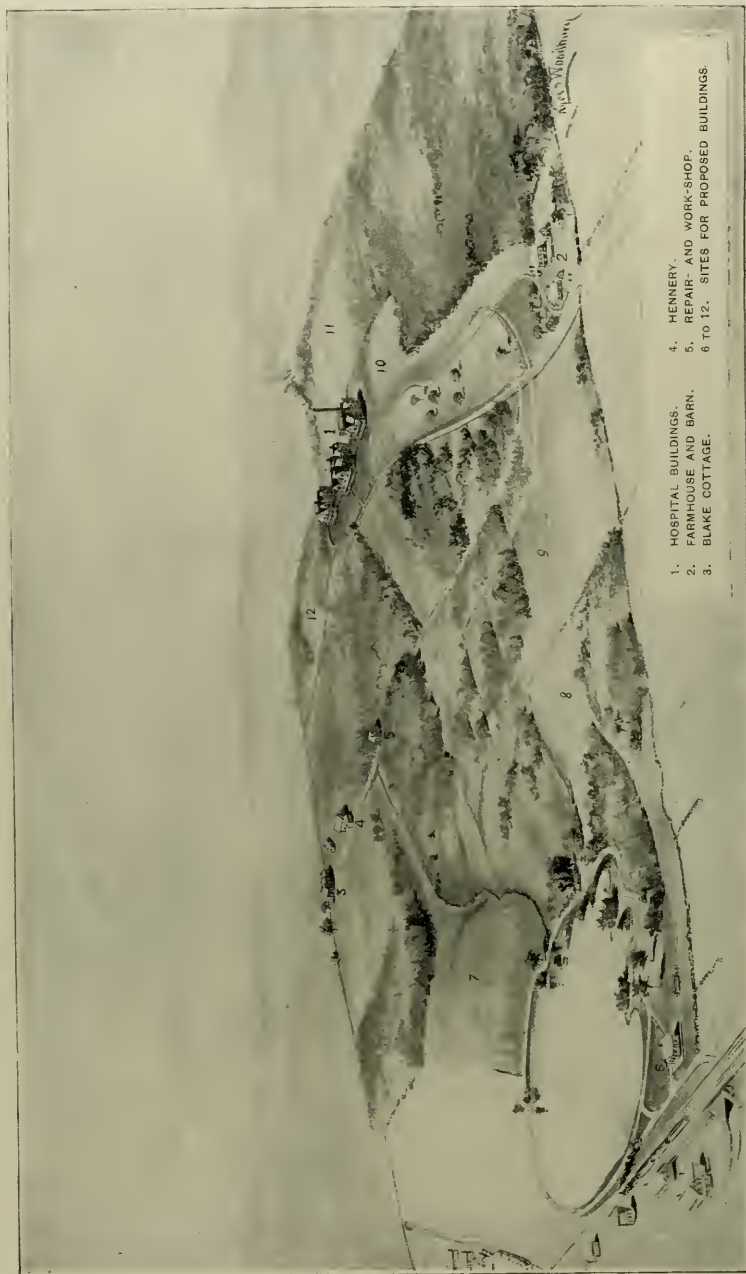
To supply water, a new covered reservoir, which holds

178,000 gallons, has been built of masonry on the high land west of the institution, into which water from the Monson town system flows by gravity. This affords an excellent and abundant supply for all requirements.

The sewage is distributed on the sloping ground at the north when needed for fertilization, and at other times passes farther along to the filtration area, which is composed of coarse gravel.

It will be noticed that the Massachusetts law requires that insane epileptics of a mild class, as well as the sane, shall be received at the hospital. It was deemed necessary by the trustees to provide for custodial care of patients in the present group of buildings. For such sane epileptics as will be able to live under the conditions to be found in the ordinary village community, it is proposed to erect, at a considerable distance from the present buildings, cottages similar to ordinary dwellings.

The hospital was opened for the reception of patients by the proclamation of the Governor, May 2, 1898. On September 30, 1898, there were 200 inmates, the sexes being about equally divided. Of this number 58 were supported by the State, 134 by towns, and 8 were private patients. Ten per cent. of those received are young and teachable. A school has been organized for elementary instruction and preparation for manual training. It is intended to teach carpentry, painting, shoemaking, tailoring, and other handicrafts. Twenty-four of the more demented men have been employed in grading and making roads; others have worked on the farm, in the laundry, and in and about the kitchens, making fifty-three per cent. working outside the wards. Thirteen of the men patients have assisted in the wards. Thirty-four per cent. of the whole number are helpless, feeble, and crippled.



1. HOSPITAL BUILDINGS.
2. FARMHOUSE AND BARN.
3. BLAKE COTTAGE.
4. HENNER.
5. REPAIR AND WORK-SHOP.
- 6 TO 12. SITES FOR PROPOSED BUILDINGS.

HOSPITAL COTTAGES FOR CHILDREN, BALDWINVILLE, MASS.—GENERAL VIEW OF THE ESTATE.

Thirty-eight per cent. of the women have been employed in the kitchen, laundry, sewing-rooms, and about the administration building; seventeen of their number have helped in the wards. Thirty-six per cent. are helpless, crippled, and feeble.

This institution, under the superintendency of Dr. Owen Copp, formerly first assistant physician in the Taunton Lunatic Hospital, has made a very creditable showing, and promises to occupy a large field of usefulness in the future. Its scope embraces the education, employment, and recreation of its beneficiaries. The scientific study of epilepsy, for which it is expected ample facilities will be provided, will form an important department. The capacity of the hospital is not equal to the demand for admission.

HOSPITAL COTTAGES FOR CHILDREN AT BALDWINVILLE.

This interesting institution, the first of its kind in this country, having for its special object the treatment of epileptic children under State auspices, has been developed on the cottage plan, and accommodates 130 children of both sexes. There are received here children under fourteen years suffering from epileptic or epileptiform seizures; children afflicted with other nervous diseases, who are not feeble-minded; and deformed children. About seventy per cent. of the inmates are epileptics. Upwards of a thousand children have been treated since the opening of the institution in 1882. It is owned by a private benevolent corporation. In 1887 the Legislature appropriated \$10,000 to pay existing debts, obtain a water-supply, and defray running expenses. In 1889, \$55,000 were appropriated by the Legislature for the construction of new buildings; and in 1890 the sum of \$30,000 was added to the grant, for the completion of the work, upon the condition that a majority of

the trustees should be appointed by the Governor. The law was afterwards changed, so that the hospital now has a Board of five trustees appointed by the Governor and a co-operating Board of sixteen elected by the corporation.

The institution is under the immediate charge of Dr. Everett Flood, who is assisted by a staff of specialists in the various medical and surgical branches of the hospital. The total force of employees numbers thirty-four. The average weekly per capita cost of maintenance for the fiscal year ending September 30, 1898, is given as \$4.19. The receipts for board were \$20,023.45, and from donations, \$16,767.85. The expenditure for salaries was \$10,985.26. Ten per cent. of the inmates are State patients. Those from other States are admitted on a vote of the medical staff. A free bed is provided for \$200 a year; a permanent free bed for \$5000. The permanent fund amounts to about \$60,000. There is published in connection with the institution a monthly periodical called the *Hospital Cottage Friend*.

Quarterly meetings of the trustees are held in rotation in different parts of the State, an arrangement which stimulates public interest over a wide area. With the aid and co-operation of various philanthropic organizations throughout the State, the institution has accomplished most beneficent work.

Subordinate to the Board of Trustees there is a Woman's Board, whose members meet in different localities, and assist in raising means for the hospital and otherwise co-operate in its work. Under the direction of the Woman's Board there is organized a Children's League, composed of little folks, who are encouraged to contribute small sums, and thus extend their sympathy to the hospital sufferers.

Occupation and schooling are deemed remedial measures. Dr. Flood says he could hardly dispense with this kind of



HOSPITAL COTTAGES (BALDWINVILLE).



SCHOOLHOUSE (BALDWINVILLE).

treatment. The old plan of entire cessation from school work and absolute unrestraint is no longer favored. Out of 150 epileptic cases treated in nine years the following results are given: Recoveries, 25; very much improved by care, 44; improved somewhat, 52; not improved, 6; died, 18; became insane, 5.

The Superintendent says that 14 of the 25 patients classed as recovered, though still free from spasms, have defects which prevent them from being self-supporting, and they must to a large extent be cared for by others. Eleven of the children, however, are bright and active, and are said to give promise of being for the rest of their lives useful and independent citizens.

The farm in connection with the institution comprises about two hundred acres of woodland and pasture-land, with an abundance of wild berries on the estate.

NEW JERSEY.

For a number of years attention has been directed by prominent citizens of New Jersey to the need of suitable provision for epileptics in that State. The recognized leader in the movement to ameliorate their condition was Prof. S. Olin Garrison, to whose indefatigable efforts the progress made must be mainly ascribed.

In accordance with a resolution of the Legislature of New Jersey passed in 1895, the Governor appointed a commission of five persons, of which Dr. P. C. Barker was made chairman, and Professor Garrison secretary, to make an investigation into the number and condition of the epileptics in the State and report thereon to the Legislature. The commissioners addressed circulars of inquiry to upwards of two thousand physicians and one hundred institutions in the State, and received replies from about four hundred of the

former and about forty of the latter. Altogether, 1060 cases were reported upon—709 by the physicians and 351 by the institutions. From the inquiries made the conclusion was reached that the total epileptic population of the State was more than two thousand. In the two State hospitals for the insane there were 168 cases; and the commission reported that it had been found impossible to classify epileptics in these institutions, and that, in the opinion of the medical directors of the hospitals, the presence of epileptics and insane persons in the same institution was injurious to both. Moreover, it was shown that a considerable number of the former were sane.

The report of the commission was a comprehensive and forcible document. It urgently recommended legislation which would open the way for the removal of epileptics from the almshouses and homes of the poor and place them in a special colony or village where they could receive proper treatment and be subjected to the curative and ameliorating influences which experience had shown to be efficacious. It was presented to the Legislature in 1896, and a bill was introduced about the same time for the establishment of a colony on a plan recommended by the commission. Coincident with the presentation of the report to the Legislature the commission issued circulars making an earnest appeal to the benevolently disposed for co-operation in an attempt to secure the desired legislation. The bill passed both branches of the Legislature, but did not become a law, failing to meet the approval of the Governor. Subsequent to the defeat of the measure in 1896, a resolution of the Allopathic State Medical Society endorsed the necessity for such legislation, and in 1897 the Society reaffirmed its position, and appointed a committee to urge the matter further.

A bill for the establishment of an institution for the special care of epileptics, introduced in the Legislature of 1898, was passed by a unanimous vote of both houses, and promptly approved by Governor Voorhees. The "Act to establish a village for epileptics," Chapter 113, Laws of 1898, provides that a Board of unsalaried managers consisting of six residents of the State, not more than three of whom shall be members of the same political party, shall be appointed by the Governor, with the advice and consent of the Senate. It was made the duty of the managers to select a site for an epileptic village within six months after their appointment, to draft general rules for the government of the village, and to appoint a superintendent.

The managers appointed under the foregoing act selected a location at Skillman, Somerset County, one and a quarter miles from the main line of the Philadelphia & Reading Railway, and about midway between New York and Philadelphia. The site purchased contains 187 acres, upon which is a capacious and substantial mansion. The estate cost \$11,500.

By "An Act relative to the government and management of the New Jersey State Village for Epileptics," Chapter 152, Laws of 1899, the powers and duties of the managers and leading officers of the colony are particularly defined. The act provides that the Board of Managers, upon the nomination of the Superintendent, who is required to be a well-educated physician, shall appoint a steward, as many assistant physicians as may be necessary to carry on the work of the colony, and a matron. These officers hold their positions at the pleasure of the Board. The Superintendent is recognized as the chief executive officer of the colony.

Indigent patients are received from the authorities of

different counties in proportion to the population of such counties. Private patients may be admitted at the discretion of the managers.

A request for admission to the colony must state the full name, place of residence, age, place of nativity, if known, occupation, etc., of the applicant, and the degree of relationship between himself and the person for whom he seeks admission. It must be accompanied by the certificates of two physicians, stating that the person who desires to be admitted is an epileptic. It is required that the certificates be given under oath or affirmation within thirty days immediately preceding the reception of the patient into the colony. The physicians giving such certificates must be permanent residents of the State, who have graduated at some regularly incorporated medical college, and have been in the actual practice of their profession for at least three years. The certificates and other forms of admission must be in accordance with certain specified forms adopted by the Board of Managers, and must give a complete history of the case, and the cause, nature, and progress of the disease, so far as is known. In the case of a person maintained at private expense, in addition to the aforementioned requirements, a bond for the support of the patient so long as he shall remain in the colony must be executed. This is drawn in favor of the Treasurer and signed by two sureties approved by the Superintendent.

It is required that patients when admitted shall be in a state of bodily cleanliness, shall be comfortably clothed, and provided with suitable raiment, as prescribed by the Board of Managers, and shall not have been exposed to, or be suffering from, any contagious disease. No child under five years of age is allowed to be admitted.

For the purpose of preserving and maintaining order and

preventing disturbances and trespassing on the lands of the colony, the managers are given police jurisdiction within the grounds and for two miles beyond its boundaries.

The sale, directly or indirectly, of any spirituous, malt, vinous, or intoxicating liquors or beverages, or any composition of which said beverages or any of them shall be the chief ingredient, within two miles of the boundaries of the colony, is made a misdemeanor, and is punishable by a fine or imprisonment or both.

An appropriation of \$25,000 was made by the Legislature of 1899 for the erection of two brick cottages, and \$8000 to buy additional land adjoining the property already purchased, it having been found that the acreage originally secured was insufficient for the proper development of the colony. An appropriation was also made for supplying water, for sewerage purposes, for salaries of officers, and making necessary repairs.

The plan of the founders as suggested in the term "epileptic village," which implies extended classification in inexpensive buildings, it is hoped may be carried out. The President of the recently appointed Board of Managers, Rev. James M. Buckley, LL.D., and the Secretary of the Board, Professor Garrison, both strongly favor the village or colony plan.

TEXAS.

A paper by Dr. F. S. White in advocacy of the colony plan for the care of epileptics was read before the State Medical Association in 1896. It was published in the *Transactions* of the Association for that year and created public discussion and favorable comment. A committee, of which Dr. White was made chairman, was appointed by the Association to present the subject to the Legislature.

Some action was taken by the Senate looking to the exclusion of epileptics from insane hospitals, with the ultimate aim of making separate provision for them; but no legislation was consummated.

The benevolent efforts of Dr. White and others interested in the welfare of these sufferers were not destined, however, to be lost. In his last Annual Message the Governor of the State directed the attention of the Legislature to the necessity of making suitable provision for this class, and an act was passed providing for the establishing of an epileptic colony and appropriating \$50,000 therefor. The act authorizes the appointment by the Governor of three commissioners to select the site, which shall be approved by him. It also provides for the subsequent appointment by the Governor of a Board of Managers, who shall be entrusted with the erection of the buildings and the management of the colony. It is further provided that the epileptic insane now confined in the several asylums of the State "be transferred to the colony, and that such others as may from time to time be declared epileptic lunatics of the State, under such rules and regulations as are now or may hereafter be provided by law, shall be confined and treated in said colony." The act concludes with the following clause: "Whereas, there is now a large number of insane persons in the jails throughout the State who are much in need of immediate treatment; and, whereas, there is a large number of epileptic insane in the several asylums of the State who are in great need of separation from the other insane of the several asylums; and, whereas, there is now a large number of epileptic insane throughout the State who are in great need of care and treatment, who cannot be admitted into the several asylums on account of their incurable condition and the crowded

condition of said asylums: therefore, a public emergency and imperative public necessity exist, which render it necessary that the constitutional rule requiring bills to be read on three several days be suspended, and that this act take effect and be in force from and after its passage; and it is so enacted."

The Governor appointed a commission to carry into effect the purposes of the act, and it has accepted from the city of Abilene a site of 640 acres for the colony. Dr. B. M. Worsham, Superintendent of the State Lunatic Asylum at Austin, is a member of this commission, and since his appointment he has visited, among other institutions for epileptics, the Craig Colony, the Massachusetts Hospital for Epileptics, and the Pennsylvania Colony Farm, with a view to preparing plans for the development of the colony.

CHAPTER V.

PENNSYLVANIA, MARYLAND, MISSOURI.

PENNSYLVANIA.

THE Lunacy Committee of the Board of Public Charities of Pennsylvania in its report for 1893 made mention of the fact that 575 epileptics were detained in the various institutions of that State under the lunacy law. The report contained a strong plea for the establishment of a State institution exclusively for epileptics, to be conducted on an industrial basis. The Board of Public Charities in 1895 renewed this plea. The same year Secretary Biddle in his report to the Board said: " More frequently than ever has my attention been called during the past year to the necessity for the erection of an institution in Pennsylvania devoted to the care of epileptics. . . . Special appliances in a special environment are necessary for the treatment of this peculiar form of disease. So long as Pennsylvania provides no such institution she will be derelict in her duty to a large number of her citizens who have a right to demand it."

A bill providing for the erection of a State hospital for epileptics, prepared by the Lunacy Committee, was introduced in the Legislature of 1897, but failed to become a law. In again urging the establishment by the State of a special institution for this class the committee presented forcible reasons for such action. Among others given were



PENNSYLVANIA EPILEPTIC HOSPITAL AND COLONY FARM.
ADMINISTRATION BUILDING AND COTTAGES, ONE EACH FOR MEN AND WOMEN.

the following: "The medical treatment of epilepsy has been unsatisfactory and discouraging, mainly because we have had no State institution organized and especially equipped for a scientific study of the various forms and various conditions and causes of this disease and its many complications. The truly scientific study of epilepsy is a wide and as yet untilled field in our State and country. Even in our State hospitals, the large number of inmates, the unfavorable conditions for treating epilepsy in a mixed class of the insane, and the amount of other medical work on hand, render anything like a true study and special observation and treatment of epilepsy a physical impossibility. A very large proportion of the epileptics, whether in our State hospitals and almshouses or in the community, would be able to be usefully and profitably employed if segregated in a quiet community, properly classified, in a wholesome country air, free from anxiety, poverty, noise, and excitement, and under special medical treatment. Farming, gardening, horticulture, domestic work, carpentering, and a variety of mechanical arts are well adapted to the condition and ability of the average epileptic, who would thus be able to contribute very largely to the cost of his maintenance, if placed in an appropriate institution."

THE PENNSYLVANIA EPILEPTIC HOSPITAL AND COLONY FARM.

This institution is a private corporation controlled and directed by a Board of Managers, assisted by a Ladies' Aid Committee. It is supported by private contributions and the State.

The Colony Farm is situated at Oakbourne, twenty-two miles from Philadelphia and two miles from Westchester, in a section of highly improved farming country. The farm consists of 110 acres of productive land, and, with the stone

farmhouse, a large and well-arranged barn, a dairy-house, and other buildings, cost \$14,000. The estate was the gift of Miss Rebecca Coxe and Mr. Eckley B. Coxe, Jr., each of whom contributed \$7000 to this laudable object. In 1896 Mr. Henry C. Lea generously supplied the means to erect on this property an administration building and two cottages. In the administration building, which stands between the two cottages, are the managers' room, the offices and rooms of the Superintendent, assistant physicians, and matron, also a drug dispensary, bakery, storerooms, work-rooms for patients, and a kitchen.

The two cottages—one for each sex—are attractive, and have associate dormitories with from two to six beds, rooms for nurses, bath- and toilet-rooms, and a dining-room and kitchen. There is no general kitchen. The management prefers that each cottage shall be as complete as possible in its domestic arrangements.

The Colony Farm was opened for the reception of patients February 3, 1898. At the date of March 4, 1899, it contained thirty patients—twelve men and eighteen women. The staff consisted of a Superintendent, Dr. J. F. Edgerly, a matron, two nurses, two night-attendants, an engineer, a farmer and an assistant, a night-watchman, laundress, cook, and maid.

A branch of the work is conducted in Philadelphia, corner of Cherry and Lambert streets, in a stone edifice formerly known as the Pennsylvania Hospital for Epileptics. This has accommodations for twenty patients, and is used as a reception-house and dispensary. Experience demonstrated that the work of the Pennsylvania Hospital could not be made successful in its restricted quarters. Farm colony life having been deemed essential, by mutual agreement of those interested the work was consolidated



VIEW OF COLONY FARM FROM ADMINISTRATION BUILDING.

with that of the Colony Farm in 1896. Since that time the two departments of the institution have been under the direction of one Board. The future development of the charity is looked for at the Colony Farm.

The requests for admission far exceed the capacity of the institution, applications coming from New Jersey, Delaware, and Maryland.

The women do all the household work in their several departments and much of the sewing. They enjoy the use of a well-filled library, and music is a prominent feature of entertainment.

In reference to the assistance rendered by the Ladies' Aid Committee during the year, Dr. Morton, the Secretary of the Board of Managers, says: "They have rendered excellent service, and by frequent personal visits, by supplying materials for embroidery and fancy sewing, numerous books, pamphlets, and games, and money for excursions in summer, giving standing orders for ice-cream once a week, etc., they have promoted the happiness and contentment of most of the patients who have been under our care, and they have thus done much towards their relief."

Dr. Edgerly says: "All patients admitted to the colony receive careful, individual attention. The sanitary condition is as perfect as modern science can make it; the water-supply is abundant and absolutely pure. The buildings are thoroughly ventilated, heated by steam, and lighted by electricity. The regular exercise out-of-doors, regular hours for occupation, recreation, and rest, with a carefully prescribed diet, combined with medical treatment according to individual needs, have accomplished much during the last year.

"All patients now at the colony are distinctly improved in physical and mental health, and in a large majority there

is a marked reduction in the number and severity of attacks. Patients have been received and treated from fifteen different counties in the State of Pennsylvania. Most of these have been a charge on the institution, its resources having been taxed to the utmost limit."

In speaking of the financial affairs of the colony, the President of the Board of Managers, Dr. Wharton Sinkler, says: "A few of the patients pay something, but of the total number who do pay, the amount is less than fifty per cent. of the cost of maintaining them. The Legislature of 1897-98 appropriated \$5000 per annum for two years, but this sum has covered less than one half of our expenses. We have therefore applied to the present Legislature for an increased appropriation for the next two years, and should this be granted, we shall be able to admit many more patients, and extend our charity largely."

Many philanthropists in Philadelphia are interested in this work. It occupies a sphere of great usefulness, and the State would do well to lend the colony its co-operation and liberal support.

THE PASSAVANT MEMORIAL HOMES FOR THE CARE OF EPILEPTICS.

The founders of the Bethel Colony at Bielefeld and the projector of a little colony recently established in Western Pennsylvania seem to have been actuated by the same benevolent spirit. Dr. W. A. Passavant, a Lutheran clergyman, for many years held in hopeful anticipation the founding of a home for epileptics, and treasured religiously small sums of money from time to time committed to his keeping to aid in carrying out this purpose; but a life spent in ministering to the wants of the poor and needy of all classes prevented concentration of energy upon this one object, and the death summons came before the project had assumed



PASSAVANT MEMORIAL HOMES.

tangible form. The work, however, was taken up by others interested, and, in response to appeals made, nearly \$2000 were added to the amount previously collected. November 23, 1894, seven persons came together for the purpose of maturing plans for founding the home. The selection of a site for the proposed institution had virtually been agreed upon, and application had been made to Bielefeld for two deaconesses to aid in its management. At this meeting necessary committees were appointed, each of which entered upon its duties. At a second meeting of the contributors, held March 20, 1895, a permanent organization was established by electing the Rev. W. A. Passavant, Jr., president, and choosing a vice-president and a secretary and treasurer.

On the 6th of June, 1895, the first anniversary of the burial of Dr. Passavant, the Orphans' Home, pleasantly situated on the slope of a hill overlooking the town of Rochester and the Beaver Valley, was opened and dedicated as a Christian home for epileptics. The property of the Orphans' Home consisted of sixty acres of land, three dwelling-houses, two of which are of brick, a farmer's house, a barn and other outbuildings. The work of adapting the Home to its new purpose progressed rapidly; but word came from Bielefeld that no deaconesses could be spared from there, as nine had just been sent to another institution. An appeal made to the Mary J. Drexel Motherhouse in Philadelphia resulted no more favorably, and attention was then turned to the Norwegian Lutheran Deaconess Hospital in Chicago, whence two efficient persons, Sister Amalie and Sister Martha, were secured.

The object of "The Passavant Memorial Homes for the Care of Epileptics" as defined by the constitution is "to provide persons afflicted with epilepsy with opportunity for

usefulness, medical treatment, and the mental and spiritual benefits of a thoroughly Christian colony or home." The institution accommodates thirty-six patients without crowding the family houses. Three classes of patients are received from Western Pennsylvania and West Virginia, precedence being given to the former district. The first class are charity patients, who are maintained by the Homes; the second class are persons who are able to make a moderate return for their care and treatment; and the third class are those who are blessed with means sufficient to render an equivalent for the benefits received. Insane epileptics are not admitted to the Homes, and if insanity develops after a patient has been received he is removed by his friends or at the discretion of the Board of Trustees. The demands are so great upon the charity of the institution from the districts for which it is intended to provide that non-paying patients outside of these districts are not received. The Homes were not established to relieve poorhouses of their county charges, but to help epileptics whose condition is hopeful, to regain a position of self-support and cheerful contentment.

The general management of the institution is vested in twelve trustees, four of whom must be Lutherans; and the constitution provides that the internal affairs, such as the appointment and discharge of assistants and domestics, the practical arrangements for the labor, discipline, and comfort of the inmates, and the order and times of religious services, must be under the direction of deaconesses of the Lutheran Church, "in order that there may be harmony of action in the Homes, and that the evangelical spirit of him whose name it bears may ever be preserved, and the strong influence of a united religious life may be maintained in the institution."



PASSAVANT MEMORIAL HOMES.
MAKING APPLE-BUTTER.

Sisters Amalie and Martha having resigned July 1, 1897, and returned to their native country (Norway), two sisters from the Milwaukee Deaconess Motherhouse were secured to take their places. Sister Catharine Deutzer is in charge, assisted by Sister Lena Rash. Of the work of the devoted sisters the trustees say: "The quiet fidelity to duty and the happy influence of these young deaconesses in this untried and most difficult of all departments of the ministry of mercy are beyond praise. Their trials and discouragements need be known only to God, and we merely mention them to bespeak that genuine sympathy and prayerful support that workers in such surroundings sorely need to enable strength to hold out and courage to endure."

Rev. J. Ash, recently elected Superintendent of the Homes, took charge October 1, 1896. Besides ministering to the spiritual wants of the inmates, he has directed the numerous improvements made about the place, planned the work and recreation of the inmates, carried on the correspondence and innumerable business details of the institution, and in many ways increased its usefulness. There is the necessary subordinate force of male and female employees.

Regular habits of living and employment rather than medicines are relied upon as means of relief. The bromide of potassium used is obtained from Bielefeld, but it is given sparingly; and it is said that physically the patients improve when they have been at the Homes but a short time. The trustees say in their last report that, during the year 1897, no accident or disaster occurred. This was regarded by them as remarkable, as the record showed 3511 violent seizures suffered by the patients during that time. Notwithstanding there was an average of more than nine severe attacks in every twenty-four hours, to say nothing of

innumerable milder ones, the Superintendent and sisters reported a year of steady progress. The general health of the inmates and helpers was good.

During the year the farm produced twenty-five tons of hay, besides goodly crops of wheat, oats, potatoes, sweet and field corn, tomatoes, apples, cherries, and other fruits, as also all the milk and eggs required, while the gardens furnished an abundance of fresh vegetables.

The principles governing the institution are clearly and tersely expressed in the words of President Passavant. He says: "The quiet influence of pious example on the part of sisters, and the religious teaching through Sunday service, weekly Bible class, and daily worship, morning and evening, are relied upon to do much to calm and satisfy the irritations and longings of the patients, whilst simple, well-cooked food, with as little meat as is consistent with the requirements of those who labor, keeps the physical man cheerful and strong. All work—as much out-of-doors as possible—and our farm of sixty acres affords every facility for diversified occupations; whilst the situation of the Homes on a beautiful hillside overlooking twenty miles of the windings of the Ohio River, with its encircling hills, is an ideal one for repose and beauty."

THE PENNSYLVANIA TRAINING-SCHOOL FOR FEEBLE-MINDED
CHILDREN.

This institution, established at Elwyn, Delaware County, in 1859, is a private corporation liberally aided by the State. About thirty-nine per cent. of the children are supported wholly by the State, thirty per cent. partially by the State, fourteen per cent. by the city of Philadelphia, and a majority of the remainder by parents or guardians. Connected with the institution are 250 acres of land. It receives

inmates from other States, and has a population of about one thousand.

Two buildings here are devoted to the care of epileptics. The one for boys is called the Manse and the one for girls the Chalet. The former accommodates 143 and the latter 60.

Dr. Martin W. Barr, Superintendent, says regarding the treatment of the epileptics under his care: "We give them plenty of exercise, simple diet, consisting of weak coffee, tea, and chocolate, bread and milk, broths, soups, Hamburg steak, roast potatoes, roast apples, bananas, etc.

"All those above the grade of idiots attend school, but we depend mainly upon the hand-work rather than upon the intellectual training. Our treatment is confined almost exclusively to the bromides. We try everything new that comes out, but without marked success. I think about seventy-five per cent. are somewhat improved."

MARYLAND.

The provision in Maryland for epileptics and the feeble-minded is entirely inadequate. Mr. John M. Glenn, in writing upon the subject, says: "It is difficult to get either of these classes into the State institution. There is always a long waiting list. We find encouragement in the fact, however, that the public conscience is awakening gradually to the needs of epileptics, and we hope to see proper provision made for them in a few years."

THE SILVER CROSS HOME FOR EPILEPTICS.

This Home for Epileptics occupies a commanding site overlooking the Susquehanna River at Port Deposit, Maryland. It originated in a desire of the King's Daughters of

that State to benefit a class of sufferers needing sympathy and care. The gift of the homestead, with three acres of land, by Mrs. Woodward Abrahams and her children, and the immediate furnishing of the same, chiefly by various circles of the King's Daughters in the State, made it practicable to open the Home on the 30th of June, 1891. Its capacity is limited to twenty patients. Applications for admission by deserving cases are numerous and pressing. A moderate sum is usually charged for treatment, but some inmates are supported free. Aside from the income received from patients, the expenses of the institution are met by voluntary contributions. Although only women and girls are admitted, the acreage of land is much too small to meet the requirements of the home.

The treatment is chiefly hygienic and dietary, but medical treatment is administered and surgical operations are performed whenever they are considered necessary to the welfare of the patient. The general health of the inmates is good. The President of the Home, Mrs. John Thomas Mason, says of it: "The treatment is simple in the extreme. Every patient has improved in a remarkable manner after a few weeks' sojourn at the Home. We give the inmates plenty of milk, butter, eggs, oatmeal, cocoa, good bread, fruit, stewed and fresh, but few sweets, and nothing fried. They have very little meat, and that boiled and generally chopped. We regard steady employment as a great factor for good. The patients do most of the work of the house of their own accord and also work in the garden. They are tractable and obedient, and are generally happy and contented. At times some of them show symptoms of mania, especially the new patients. No restraint is used, and bromide is administered only on rare occasions. A gentle but firm control is exercised over them by an

experienced nurse. The institution is free from debt and prospering, although much more could be spent to its advantage in the way of extension and improvement."

MARYLAND ASYLUM AND TRAINING-SCHOOL FOR FEEBLE-MINDED.

This institution is located at Owing's Mills, Baltimore County, and receives epileptic children along with feeble-minded patients. It is managed by a Board of Trustees appointed by the Governor, and is supported by State appropriations, supplemented by private contributions. The State having failed to provide separate accommodations for epileptics, although repeatedly urged to do so, a member of the Board of Trustees, Mr. J. Pembroke Thom, generously contributed \$5500 towards this object. Thus a separate cottage for epileptics, with accommodations for twenty-nine patients, was added to the buildings erected for the feeble-minded. It is a substantial two-story stone structure, with basement, and is provided with a schoolroom, playroom, and teachers' quarters. It is comfortably furnished and heated with hot water.

The trustees declare that their experience has demonstrated the wisdom of making separate provision for the two classes under their care.

Connected with the institution are 186 acres of land, 100 of which are under cultivation. The farm and garden are no inconsiderable factors in the industrial life.

MISSOURI.

An act establishing a State Board of Charities and Corrections was passed by the Legislature of Missouri, March 19, 1897. Under the auspices of the Board a bill was introduced in the Legislature of 1899 for establishing a colony

for feeble-minded and epileptics. The aim of the promoters of the project, in which the Vice-President of the State Board of Charities and Corrections, Miss Mary E. Perry, is specially interested, is to provide for the time being, on the same estate, separate departments for epileptics and feeble-minded.

The object of the colony, as set forth in Section 2 of the act, is "to secure the humane, curative, scientific, and economical treatment and care of the feeble-minded and epileptics." To accomplish this purpose it is provided that a tract of fertile and productive land shall be obtained in a healthful situation, with an abundant supply of wholesome water and sufficient means of drainage and for the disposal of sewage; and that there shall be furnished, among other necessary structures, cottages for dormitory and domiciliary uses, buildings for an infirmary, a schoolhouse, and a chapel, workshops for the proper teaching and productive prosecution of trades and industries, all of which structures shall be substantial and attractive, but plain and moderate in cost, and arranged on the colony plan. It is provided that the tract of land shall be of sufficient extent to erect thereon the necessary houses and furnish employment for the patients. The sum of \$30,000 was appropriated towards carrying out the purposes of the act.

The Board of Managers is required to appoint outside of its members a Superintendent and a Treasurer. The former must be a well-educated physician and a graduate of a legally chartered medical college, with at least five years' actual practice in his profession, including at least one year's actual experience in a general hospital. These officers may be discharged or suspended at the discretion of the Board. The Superintendent is the chief executive officer of the colony, subject to the supervision and control

of the Board of Managers. It is provided that the Board of Managers shall consist of five members, two of whom shall be women.

In accordance with Section 12 of the act, the following classes of patients may be admitted into the colony: "There shall be received and gratuitously supported in the colony feeble-minded and epileptics residing in the State, who, if of age, are unable, or, if under age, whose parents or guardians are unable to provide for their support therein, and who shall be designated as State patients. Such additional number of feeble-minded and epileptics, whether of age or under age, as can be conveniently accommodated, shall be received into the colony by the managers on such terms as shall be just, and shall be designated as private patients."

Power is vested in the Superintendent, with the approval of the Board of Managers, to discharge any patient who in their judgment has fully recovered. If any patient becomes dangerously insane he must be placed in the asylum located nearest to the county from which he was sent to the colony.

EMMAUS.

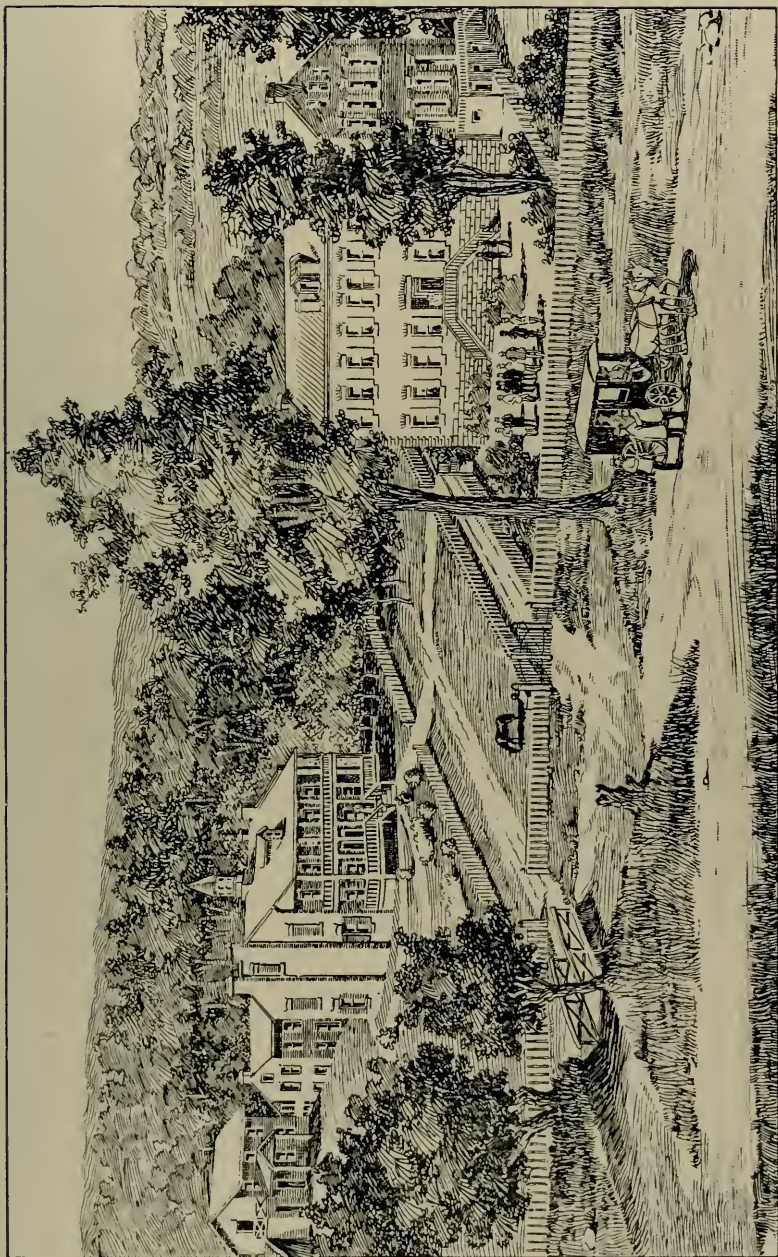
Emmaus, about four miles from the town of Marthasville, in Missouri, is the only institution west of the Mississippi devoted exclusively to the treatment of epileptics.

By a resolution of the German Evangelical Synod of North America, passed in 1892, the former college buildings of the Synod were set apart to be used as a home for epileptics under the government of a legally organized Board of Directors. This home was formally dedicated July 2, 1893, and a few days later it received its first patient. There, among the wooded hills of Missouri, is carried on in a small way a work of love similar to that at Bielefeld. The charity was

organized by Rev. C. Schnake. Two buildings of stone, spacious, well lighted, and well ventilated, afford accommodations for fifty patients, and, together with the residence of the Superintendent and a small chapel, comprise the buildings of the colony. The estate contains 240 acres, the greater part of which has not been cleared and fitted for field use.

The Rev. C. F. Sturm, Superintendent, or, as the German tongue beautifully expresses it, the house-father, in reply to a recent letter of inquiry, said that twenty-three men, sixteen women, one boy, and two girls, who were ministered unto by six nurses—three male and three female—constituted the beneficiaries of the institution. Such of the male patients as are able to work are employed in the fields or in the garden in summer and in the care of stock and clearing up the land in winter. Seventeen were wholly dependent upon the home and had been admitted into the institution solely through Christian charity. The usual charge for support, if patients are able to pay, is \$200 a year for adults and \$150 a year for minors. The same care and treatment are given those who pay, according to their ability, a reduced sum or nothing, as are enjoyed by those who are able to pay the regular fees. Nationality and religious belief are not considered in the admission of patients. Each day is begun with family worship—reading the Scriptures, prayer, and song. Though not compelled or unduly urged, the inmates find welcome at the Sabbath-day service in the chapel each week.

The treatment of epileptic patients at Emmaus is three-fold in its nature—hygienic, psychical, and medical. Great care is taken that the diet shall be nourishing to the body, and the physical health is further strengthened by warm and cold baths and outdoor exercise. Every effort is put



EMMAUS, MARTHASVILLE, MO.

forth to strengthen the will-power of the epileptic, which becomes weakened by repeated paroxysms. The medical treatment and diet are the same as at the Bethel Colony, near Bielefeld.

The female department of the asylum having become crowded, the directors recently purchased 110 acres of choice cultivated land in a healthful, elevated situation near St. Charles, on the banks of the Missouri River, where it is proposed to erect buildings for the care of the female epileptics. A department for this class has already been established there in commodious buildings temporarily rented. This branch of the asylum is under the care of Rev. J. D. Illg, Superintendent. St. Charles is readily accessible by two railways from St. Louis, of which it is a suburb.

The general control of the institution is vested in a Board of nine Directors, and the immediate management is in charge of the superintendents and physicians. The medical department is under the direction of Dr. E. A. Rembe. For support, the home depends upon individual gifts and the fees received from patients.

The results of the treatment at Emmaus have been encouraging, considering the few years of the existence of the institution. Many have been greatly improved and some have been declared cured. Very great relief has been afforded in nearly every case.

CHAPTER VI.

CALIFORNIA, MICHIGAN, MINNESOTA, WISCONSIN,
WEST VIRGINIA.

CALIFORNIA.

THE care of epileptics in California is united with that of the feeble-minded, idiots, and mentally enfeebled paralytics, under the incorporation known as the "California Home for the Care and Training of Feeble-Minded Children." Articles of incorporation for this institution were perfected in 1883, and work was begun at White Sulphur Springs, near Vallejo, in May, 1884. It was found impracticable, however, to conduct the work on a scale commensurate with its needs without placing it under State auspices. By an act passed March 18, 1885, the State assumed control of the institution, appropriated \$25,000 for the purchase of a suitable property, and authorized the disbursement of \$20,000 for two years' support of the Home. A site of fifty-one acres was secured at Santa Clara, upon which were some buildings, and others were erected thereon.

It was soon evident that a mistake had been made in purchasing so small a tract of land, and that a change of site was absolutely necessary; and a commission was appointed to select a new one. Acting upon the liberal principles which should govern State enterprises, the commission recommended the purchase of 1700 acres of fertile land—foothill and valley—at Eldridge, near Glen Ellen,

Sonoma County. This was considered an ideal site. A large part of the tract, including eighty acres of orchard and vineyard, had been under cultivation for twenty-five years. The water-supply was inexhaustible, the drainage good, the climate salubrious, and railway facilities satisfactory. The property was at length purchased and buildings erected thereon by the State; and the beneficiaries of the corporation, numbering about 150, were removed from Santa Clara to their new home November 24, 1891. The securing of this large estate opened the way to broaden the work of the institution so as to include a much greater number of the unfortunate persons of the State than was at first contemplated. In this aim, Dr. A. E. Osborne, the Superintendent, has labored with unremitting zeal, and by his facile pen and personal influence has instructed the public in its duty to the afflicted classes of the State. Under the auspices of the institution Dr. Osborne has edited for many years a quarterly periodical entitled *The Institution Bulletin*, through which he has disseminated a vast amount of information for the benefit of workers in various spheres of charity.

The beginning of State provision for epileptics in California is thus described by Dr. Osborne:

“ There was practically no organized system of caring for epileptics in California until the year 1886, when I took up in a small way the care of a few selected cases in connection with the regular work of the care and training of the feeble-minded in this institution. These selected cases were such as were complicated with imbecility or idiocy, and might not, therefore, invite criticism on the part of a captious public. At the session of the Legislature of 1887, an act was passed, in accordance with my earnest recommendation, which re-established the legal and civic foundation of the

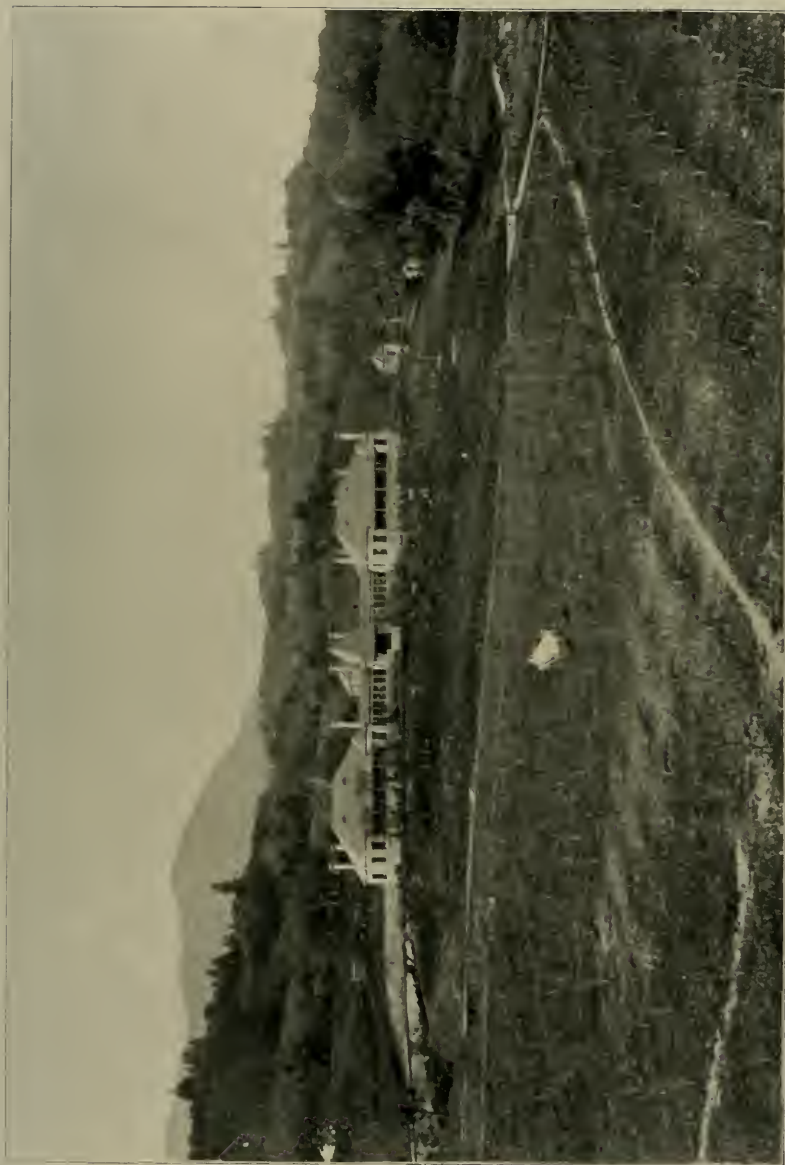
institution. This act extended the powers of the management and widened the scope of the work. . . .

“Up to this time the epileptics of the State, if cared for at all in institutions, were sent to the insane asylums—a condition of affairs which was as unjust to the management of these asylums as it was unfair to the rights of the epileptic.

“Progress along the lines I had contemplated was necessarily slow, owing to a combination of circumstances, chief among which was the inadequate plant and acreage then possessed by the Home. Several years were consumed in a memorable and fiercely contested struggle to secure a new site. As a result of this contest the present unique location, with its superb advantages and broad domain of 1700 acres, was secured. Necessary delays in the erection of buildings still further put off the day for the rational care of the epileptics who were pleading at our gates. However, I secured the erection of a small building, which is termed the Manse, for the care of epileptic cases.”

The corner-stone of this one-story structure, with accommodations for sixty cases, was laid with appropriate ceremonies in November, 1890. The building has been filled from the day of its completion, and there is now a pressure for further accommodation, also need of classification of epileptics of various grades. Until recently, only such epileptic cases as have shown marked mental enfeeblement have been admitted. It is intended to supplement the Manse with similar cottage structures, in order to extend the benefits of the institution to a more curable and hopeful class of patients. Insane epileptics are not received. If a patient becomes insane after admission he is promptly sent to one of the State hospitals for the insane.

Referring to the erection of the Manse, Dr. Osborne says:



DEPARTMENT FOR EPILEPTIC CHILDREN AT THE CALIFORNIA HOME FOR THE FEEBLE-MINDED.

“ You will no doubt recognize in this the foreshadowing of my general design and my opinions as to what should constitute an ideal institution for the care of the masses of epileptics. While working along these lines I know I have gone in almost direct opposition to the opinions expressed by my Eastern colleagues, who have long advocated the separation of all epileptic cases from the work of caring for and educating the feeble-minded. My aim has been to build up here, in California, a great State work, which shall include under its ample care every worthy epileptic and feeble-minded person. According to our environment, I can see no reason why this cannot be done with exact justice to each class to be cared for, and in perfect harmony of relationship. Our ample acreage, our abundant water-supply, our diversified grounds, our railroad facilities, with the other advantages which we enjoy, constitute dominant factors in the determination of such a choice. We can easily accommodate a thousand epileptics on the cottage or colony plan, and a thousand or more feeble-minded, without one class crowding or interfering with the other, and still have plenty of breathing-room left.”

In March, 1897, the Legislature passed an act embodying a plan promoted by Dr. Osborne, which defines the present relation of the State to epileptics as well as to certain other classes already named. The leading provisions of the act are essentially as follows:

“ The management of the California Home for the Care and Training of Feeble-Minded Children is hereby authorized, empowered, and directed to admit therein and thereto, in addition to imbeciles and feeble-minded persons, such idiots, epileptics, and mentally enfeebled paralytics, irrespective of age, as the accommodations of the Home may permit, and as may, in the judgment of the management,

appear suitable subjects for such admission, and upon such formal commitment as is now prescribed by law for the feeble-minded. But for each idiotic, imbecile, feeble-minded, paralytic, or epileptic person thus committed to the Home, the Judge of the Superior Court who officiates shall make such order or orders as are requisite and proper to secure the payment by the county from which the applicant is committed, to the State Treasurer, of the sum of ten dollars monthly, for and during each and every month or part of a month the said applicant so committed remains an inmate of said institution.

“ No person shall be deemed eligible for commitment to, or admission into, said institution unless he has been a resident of the State for the period of one year immediately preceding the date of application. The Board may cause the peremptory discharge from said institution of any person who has been an inmate or patient of said institution for the period of one month.

“ The Board of Trustees of the Home, when the accommodations of the Home permit, and provided, further, that such action does not conflict with the interests or welfare of committed cases or applicants awaiting admission, may admit, for any stated period of time, without judicial commitment, such persons as are before and hereinafter specified as eligible for admission, upon such terms of special payment, gift, bequest, donation, legacy, transfer of real or personal property, or other lawful procedure, as may appear to them to be for the best interests of the State, and may, further, secure to the Home, for the time such persons so admitted are inmates of the Home, such revenue or compensation as fully covers the actual cost to the Home for all care, treatment, education, and support therein involved.”

Respecting the efficacy of the foregoing act, Dr. Osborne

says: " Its operations have exceeded our sanguine hopes, and placed the institution upon a basis of which we feel justly proud. The law virtually establishes State care for epileptics in this place, and while it carries no provision for buildings with it, it opens our doors without reserve or possible criticism to any epileptic or paralytic who might seek shelter and treatment here. It is not generally so understood, but, nevertheless, it is a fact that may paralytics suffer from mental defect or deficiencies and require institutional care, seclusion, and treatment quite as much as any other class of patients.

" Under the provisions of this act several so-called sane epileptics have voluntarily submitted themselves for treatment, and others are anxious to, but are debarred at present by lack of accommodations. Our plans for the future have not been fully completed, since we shall have to await the action of the Legislature to secure appropriations for the necessary buildings to care for the large number of epileptics and paralytics who are waiting to be admitted."

Although my views are not in accord with Dr. Osborne's respecting the care and treatment of widely different classes of dependent persons in the same institution, his experience in the treatment of epileptics entitles his opinions to just consideration. In a letter dated March 5, 1898, replying to my inquiries, he very kindly gave the following information:

" We have now in the institution 200 epileptic and epileptoid cases out of a total population of 525. The number in the insane hospitals of the State I do not know, but presume it must reach near a thousand for all classes, probably less than half of whom are eligible for transfer to our colony here.

" Respecting the daily order of life, I must say that

regularity is the prime essential. We apply this to play as well as to work, and the same can be said of refreshment. Music, because of its pleasing harmonies, especially the more soothing melodies, and its high expression of time, is always grateful to these patients, tending to establish a psychical rhythm, as a sort of mental gymnastics to their disordered psychical organizations. The leading characteristic of epilepsy is its element of irregularity, and anything which tends to antidote this prominent feature of the disorder is directly palliative, if not curative, in its effects.

“ I consider the very best industrial occupation that line of work which will bring the patient in contact with the dry warm earth. The long dry, cloudless, and warm seasons in this State permit of epileptics working out-of-doors upon the farm, in the gardens, and on the grounds. There are very few days in the year in this locality that we cannot have our epileptics out-of doors, exercising, if nothing more. We employ epileptics, however, in other capacities, such as tailoring, sewing, and dressmaking, shoemaking, housework, etc. I think it is of advantage to place epileptics where they will be required to use more than ordinary mental effort to maintain their status. The mental drill involved is particularly beneficial. Consequently, we often assume what other people might consider risks. It is of course understood that we do not relax our vigilance over them, although we try to have them feel that in the Home they can do more for themselves, and do it to better advantage and with less supervision, than they ever did for themselves before.

“ We have no fixed dietary. Over twenty years' experience with this class of people has shown me the fallacy of considering them all alike. To some we give meat, to others we do not; some have largely a nitrogenous diet,



BOYS' KINDERGARTEN CLASS (CALIFORNIA HOME).



GIRLS' KINDERGARTEN CLASS (CALIFORNIA HOME).

others have little nitrogen in their food. We are guided in this matter by the physical and mental condition of the patient himself, and the character of his spasms and their frequency. As to what we give the patients, we aim to have it of superior quality, well cooked, easily digestible, and given in such quantities and at such intervals as may not overload the stomach, and thus overtax the visceral organs.

“As to my ideal of an institution for the care and treatment of epileptic children, I give my answer without hesitation—a cottage settlement in connection with a progressive and well-equipped institution for the care, training, and education of feeble-minded children. While epileptic children need some medical attention, their infirmities are such as require more the skilled care and training of patient and competent teachers, who have schooled themselves in the intricacies of mental defects and perversions shown by the purely feeble-minded. With epileptic children it is largely a question of how well their handicapped mentalities may be developed, and for all their psychical aberrations I know of nothing so promising in the matter of treatment as properly selected and carefully applied educational forms and drills. The physician and the teacher are indispensably needed as much as the physician and the trained nurse are needed with the physically sick. One cannot cure without the aid of the other, though the burden of the work must fall upon the shoulders of the teacher, to whom I would accord the just meed of praise and credit. If the epileptic child under the system suggested is benefited to the extent that it can go out into the world, well and good; if, on the other hand, it retrogrades, it finds its level in the sequestered wards of that department of the institution which may care for the hopeless imbecile.”

The Home has expended upwards of half a million dollars for land and buildings. With the plant as now established, Dr. Osborne thinks that the per capita cost of support, exclusive of salaries, need not exceed \$100 per annum.

In regard to the prospective development of the Home, Dr. Osborne writes, under date of March 31, 1899, that, although the last Legislature granted very liberal aid in all the lines desired by the managers of the institution he represents, its action did not meet the approval of the Governor. "My plans for the epileptic," he says, "are therefore of necessity to amount to little, so far as State care is concerned, for at least two years more. The 'campaign of education,' however, will go on so long as I have a voice to raise in behalf of these miserable people and until something is done to better their condition."

MICHIGAN.

As a result of fifteen years of persistent agitation and discussion, the Legislature of Michigan, in 1893, established, on the cottage plan, the Michigan Home for the Feeble-Minded and Epileptic, at Lapeer. The institution was not formally opened until 1895. During the summer of 1897 a building designed to accommodate 76 female epileptics was erected, costing, with furniture, \$18,000.

Connected with the Home are 160 acres of land, and the management has secured an option on 600 adjoining acres.

The institution is custodial in its policy. "All feeble-minded and epileptic persons above the age of six years, who are legal residents of the State of Michigan, may, in the discretion of the Board, be admitted to the Home without charge for tuition, board, washing, medicine, or medical attendance. But where the parents or guardians of any person or persons who may be admitted are able to

contribute to their support in whole or in part, they may be required to do so under uniform rules to be established by the Board of Control. In the selection of inmates preference shall be given to indigent or pauper orphan children; and when this class is provided for, such others may be admitted for whom application may be made whenever suitable accommodations have been provided; and when these classes are provided for, other feeble-minded and epileptic persons may be received."

Between two hundred and three hundred feeble-minded and epileptic children were waiting for admission at the close of 1897. Other buildings for epileptics have been projected.

MINNESOTA.

In its Biennial Report for the period ending July 1, 1896, the State Board of Corrections and Charities referred to the opening of a special department for epileptic children in the Minnesota School for Feeble-Minded as likely to meet a public want, although it would greatly increase the pressure for admission to that institution. The Board estimated that there were not less than one thousand epileptics in the State, a large proportion of whom would desire admission to the School and many of them would contribute to their own support by labor. The Board in conclusion said: "If the State is to undertake this great work, however, we think that it would be the best policy to establish a new and distinct institution."

The Minnesota School for Feeble-Minded is supported entirely by the State. At the date of January 5, 1898, there were in the institution 151 epileptics varying from early childhood to old age. Ninety-three were males and 58 were females. Of the whole number, 42 males and 26

females are provided for separately from other patients. A section of one of the buildings is devoted exclusively to the boys. They have their meals, lodging, training, and industrial occupation distinct from the feeble-minded. The family of epileptic girls dine with the other inmates. A comfortable cottage is about completed, however, where they will be entirely separated from the others. The remaining epileptics are quite idiotic, and they are distributed throughout the custodial department. In the care of the latter no distinction is made from that of their associates. Dr. A. C. Rogers, Superintendent, says that "medical and industrial treatment are carefully studied. We think occupation, especially out-of-doors, is of equal importance with medical treatment, and in many cases is of more importance than the latter. School training is open to epileptics to a limited degree, but I do not consider it of very much importance unless the cases improve in general health." Dr. Rogers makes the emphatic declaration that he believes separate industrial and home colonies for epileptics the best system yet devised for them.

WISCONSIN.

No provision is made in Wisconsin for the special care of epileptics in entirely separate institutions. The Wisconsin Legislature, in 1895, instructed the State Board of Control to acquire sufficient land for a home for the feeble-minded and epileptics of the State, and appropriated \$100,000 for this purpose and the erection of buildings. A site embracing about six hundred acres was accepted as a gift from Chippewa Falls, from which city it is about half a mile distant. In addition to the land, a bonus of \$10,000 was given to secure the location of the home at that place. In order to obtain the amount of land desired the State

was obliged to purchase 421 acres more, making a total of 1021 acres.

The institution, when completed, will include two buildings for epileptics, differing from the general plan of the others by having separate dining-rooms. Each of these departments will accommodate seventy-five inmates. Only the better class of patients will be admitted to these dwellings, the low-grade epileptic children being cared for in a general custodial building near at hand. Of the fifteen structures originally designed for the complete plan of this institution, but two large buildings ultimately intended for custodial care, and one of the buildings for epileptics, are erected. The age limit for admission is thirty years for males and forty years for females.

Superintendent Wilmarth writes: "Our plant will include two schoolhouses and a gymnasium building. We shall also open shops of various kinds and develop industrial training to its greatest possible limit. Epileptics will share the school and industrial work so far as their condition will allow. Their treatment will consist of such medical and dietary measures as their individual cases may seem to require. I am a firm believer in the efficacy of systematic occupation for epileptics as a remedial agent, and intend that they shall all have such regular daily work as they are capable of performing."

WEST VIRGINIA.

Four years ago a bill was introduced in the Legislature of West Virginia through the efforts of Mrs. Mary Jackson Ruffner, of Charleston, providing for an Asylum for Incurables. Not disheartened by the defeat of the measure, Mrs. Ruffner secured the introduction of the bill at a subsequent session of the Legislature, strengthening her plea

for its passage by placing upon the table before the legislative committee whom she was addressing a poor, suffering, incurable child, whose pitiable condition so appealed to each heart that the vote of every member was cast for the bill, although the same committee had previously disapproved of it. After a hard struggle the bill passed the Legislature and became a law, carrying with it an appropriation of \$10,000.

The site selected for the institution is at Huntington. It is the intention of the managers of the Asylum to erect at once a building for the accommodation of deformed and crippled children, and to construct subsequently, as means will allow, a building specially planned for epileptics and another for idiots.

Considering the aims and purposes of this praiseworthy enterprise, the name chosen for the institution is singularly inappropriate. To commit deformed and crippled children or epileptics, many of whom are improvable, if not curable, to a place having so disheartening a designation as an Asylum for Incurables, would be a sad mistake.

The Board of Managers is composed of influential persons. Mrs. Ruffner is President of the Board and is deeply interested in the success of the work.

CHAPTER VII.

IOWA, ILLINOIS, CONNECTICUT, VIRGINIA, CANADA.

IOWA.

THERE is no special provision for epileptics in Iowa. The Institution for Feeble-Minded Children at Glenwood has a population of 760, of whom about twenty-five per cent. are epileptics. Superintendent Powell says:

“ We have no special rooms or conveniences set apart for epileptics. It is true we have classified them as best we could with our present arrangements, but I anticipate something will be done in the future that will be appropriate for their treatment and care. A bill for this purpose has been before our Legislature, but after passing the Assembly, it was lost in the Senate. . . .

“ I look favorably upon the plan for a separate colony for epileptics, not from direct observation of its results, but from more than a dozen years of continual contact with one hundred or more epileptics commingling with the more harmless forms of mental weakness, and from reports of colonies of this character. I believe the time is near at hand when Iowa should seriously consider special provision for this deserving class. . . . To continue to house them promiscuously with the harmless imbecile is unjust and dangerous. To care for them in separate or detached buildings in connection with institutions for feeble-minded children will require such extra facilities and attention as to

encumber the management and prevent the more favorable results obtainable in an independent colony."

The Board of Trustees of the institution of which Dr. Powell is the able Superintendent entirely coincide with his views regarding the desirability of separating epileptics from the feeble-minded. The superintendents of the Iowa hospitals for the insane also advocate the sequestration of this class and favor the colony system. The claims of the epileptic were not urged upon the State Legislature of 1898, but the act creating the Board of Control of State Institutions enjoins the Board to encourage and urge the scientific investigation of the treatment of insanity and epilepsy by the medical staffs of the hospitals for the insane and the institution for feeble-minded, and the publication from time to time of bulletins and reports of the scientific and clinical work done in said institutions. Several of the medical societies have endorsed the colony plan, notably the Iowa State Medical Society and the Medical Society of the Missouri Valley.

ILLINOIS.

The Board of Public Charities of Illinois, in its Biennial Report presented to the Governor October 1, 1894, estimated that there were about eight thousand epileptics in the State, from whom the ranks of dependent epileptics were constantly recruited. It was stated in the same report that there were a great many epileptics in the hospitals for the insane who were in no sense insane, and whose sufferings were aggravated by being considered insane and classed as such. The opinion was expressed that the younger cases in the almshouses should be separated from the ordinary almshouse population and placed where they could have such medical care as might mitigate their disease, such diet as would modify their seizures, and such teaching and

occupation as they could profit by. Moreover, it was thought that the epileptic children in the school for feeble-minded, of whom there were 125, should receive separate care. The Board expressed the following opinion: "The most careful examination which we have been able to make has convinced us that for the general care of epileptics no plan has been proposed so humane and so scientific as the colony plan." This opinion was coupled with the recommendation that the Legislature at once appoint a committee to select a suitable site for an epileptic colony.

The Illinois State Medical Society, at the instance of Dr. J. B. Maxwell, passed a resolution emphatically and unqualifiedly endorsing the scheme for such a colony as being "humane, practical, and necessary."

In its report presented to the Governor in 1896, the Board of Public Charities urged still more strongly the establishing of a colony for epileptics, and advised the purchase of at least one thousand acres of land for such an institution. In concluding its report upon this subject the Board said: "We urge an epileptic colony, first, to afford protection, together with the greatest degree of freedom consistent with the safety of the inmates and society, for a class of our population now suffering, neglected, and too often a public menace; second, to provide education, training, and industrial pursuits for all who can be taught or who can work; third, to apply the best medical care and investigation to the study of epilepsy, so as to insure such alleviation as is possible for the inmates, so as to obtain and diffuse knowledge as to the nature and prevention of this disease, and so that by a careful study of the influence of heredity the people may be fully informed of the responsibility of parentage, with the hope that the future burden of the State and society may be lightened."

A bill for the creation of an epileptic colony was presented to the Legislature in the early part of 1897, but failed to become a law. The necessity for a State institution for epileptics in Illinois is so apparent and is so strongly urged by many charitably disposed and influential citizens that the recommendations of the Board of Public Charities and the Illinois State Medical Society for the establishment of such an institution will probably ere long be adopted by the Legislature.

CONNECTICUT.

No special provision has been made by the State of Connecticut for epileptics, although the need for such has been felt. In the Biennial Report of the trustees of the Connecticut Hospital for the Insane for the period ending June 30, 1892, attention was directed to the fact that there were ninety-six epileptics in the State Hospital, and it was intimated that Connecticut might derive advantage from the establishment of a village colony for this class near an industrial centre. It was suggested that New Haven was especially suitable for a site, because of its proximity to Yale University and the advantages that might result from affording the medical staff of the University an opportunity to study the nervous phenomena presented in such a colony. There are in the State many epileptics in the almshouses and elsewhere not receiving proper care and suffering from neglect. A few epileptic children are in the excellent institution for the feeble-minded conducted by Dr. George H. Knight at Lakeville.

VIRGINIA.

No one is better qualified to judge of the needs of epileptics in Virginia than Dr. Wm. Francis Drewry, Superintendent of the Central State Hospital at Petersburg. The

experience he has had with this unfortunate class, his skill as a specialist in the treatment of mental diseases, and his humane instincts, which have led him into extended inquiries respecting epileptics, eminently fit him for defining a State policy for their care. In a paper read by Dr. Drewry before the State Medical Society of Virginia in September, 1895, the claims for a special institution or colony for this class were ably set forth.

Dr. Drewry ascertained that there were 115 epileptics in the three hospitals for the white insane in Virginia and 85 in the hospital for the colored insane. A considerable number of them were not insane, but they were committed to these institutions for lack of suitable places to receive them. Through persistent correspondence Dr. Drewry learned that in forty out of sixty counties from which he obtained returns there were in the county poorhouses 45 white and 53 colored epileptics. In the county poorhouses not heard from and in the city almshouses he estimated that there were as many more. In order to arrive at something like the approximate number of epileptics outside of institutions, Dr. Drewry sent communications to two hundred representative physicians distributed in every county throughout the State, asking for the number of epileptic patients in their respective localities and the probable proportion to the general population. The prevailing opinion among the ninety-three physicians who replied was that there were three epileptics to every one thousand of the population, or nearly five thousand in the entire State. Dr. Drewry expressed the opinion that, at a low estimate, there were not less than three thousand in the State.

Through the urgent appeals of Dr. Drewry and others interested, the Legislature of 1895-96 passed an act providing for the appointment of a commission to collect data

and visit institutions and colonies in other States and report to the Legislature of 1897-98 as to the desirability and feasibility of establishing an institution for epileptics in Virginia. The State Medical Society subsequently appointed a committee of five to co-operate with the commission and urge upon the Legislature the necessity of providing State care for those of this class who are dependent. The commissioners visited, among other institutions, the Craig Colony and the Ohio Hospital for Epileptics and presented a report to the Legislature in January, 1898.

The commission corroborated the statements made by Dr. Drewry in his very instructive address to the State Medical Society as to the condition of epileptics in the State and the need of State care and protection for them. It reported that there were upwards of 200 in the county and city almshouses, in the hospitals for the white insane 225, and in the hospitals for insane negroes 95; and that there were certainly 3000 in the State outside of any institution, at least 600 of whom were totally unable to earn a livelihood, or, with the assistance of friends, could only eke out a scanty subsistence. The opinion was expressed that it would ultimately be in the interest of public economy if the State would assume charge of all indigent epileptics and provide for them suitable means and ways by which, at least, many of them would contribute to their own support. It was recommended that one of the State hospitals be utilized in part for the care of all the insane white epileptics of the State, thus leaving two other hospitals for the accommodation of all white insane persons not epileptic, and that suitable buildings should be set apart exclusively for epileptics not insane, so that their diet and medical treatment could be properly regulated. It was stated that this policy had been adopted at the Central State Hospital at Petersburg,

where all the female colored epileptics occupy a separate building constructed especially for epileptics, and that the results were satisfactory. The commission recommended the purchase of 1000 acres of land and the establishment of a colony, and that the expense of establishing and equipping the colony should be borne exclusively by the State, but that the maintenance should be paid for in part by the various counties and cities sending patients there—say \$40 per annum for each indigent patient.

The commissioners submitted with their report the opinions of Dr. J. D. Moncure, Superintendent of the Eastern State Hospital at Williamsburg, Dr. Benjamin Blackford, Superintendent of the Western State Hospital at Staunton, and other prominent physicians in the State who concurred in their views. Dr. P. A. Irving, Secretary of the State Board of Health, and Dr. Lewis G. Pedigo, chairman of the Epileptic Committee of the Medical Society of Virginia, rendered the commission valuable service.

The report was favorably received by the Legislature. The only obstacle in the way of carrying out the recommendations of the commission was the lack of means in the public treasury. The same commission was continued, with instructions to present to the next Legislature plans and estimates of cost for a colony sufficient to meet the present pressing demands.

Much spirit is manifested in this movement to establish an epileptic colony, and it is believed the time is not far distant when the attempt will prove successful.¹ Virginia was the first State in the Union to establish a State asylum

¹ In a paper read before the Tri-State Medical Society of the Carolinas and Virginia, published in the Charlotte (N. C.) *Medical Journal* of February, 1899, Dr. Drewry says: "I have not a doubt that in a few years an epileptic colony will be established in Virginia."

exclusively for the insane, and the first State or country to establish a public institution exclusively for the colored insane. It is not likely that this progressive commonwealth will be remiss in making needful provision for her epileptics.

CANADA.

The Government Inspector of Asylums and Prisons of Ontario, T. F. Chamberlain, writes respecting the care of epileptics: " We have lately been considering the advisability of having an institution specially for the care and treatment of epileptics, but as yet nothing definite has been done." Dr. Beaton, Medical Superintendent of the Ontario Asylum for Idiots, at Orillia, Canada, has in the institution under his charge about 140 epileptics of both sexes who are not admitted as such, but as idiots and imbeciles. Dr. Beaton says he has been urging upon the authorities the desirability of establishing a colony for the care and treatment of this class. The Ontario Medical Association has also recommended the Government to make special provision for the custodial care of epileptics.

CHAPTER VIII.

ENGLAND.

PHILANTHROPISTS in England have become aroused to the necessity of making suitable provision for epileptics, and are putting forth earnest efforts in their behalf. A number of private charities for their relief have been established during the past twelve years. Only recently has any special institution been created for their care by public authorities. The hope is now entertained that the Government may be influenced to supplement the commendable but inadequate work of private benevolence, by creating district colonies for this class under the direction and control of County Councils.

Epileptics who are insane may be sent to the insane asylums, and those who are not insane may be admitted to these institutions as voluntary patients, and are sometimes so admitted, but this is not done frequently. The only public provision for sane epileptics is in the poor-law workhouses and infirmaries, into which they drift in common with other destitute persons. In the great city of London there are but two hospitals where they are even temporarily treated. One of these is the National Hospital for the Paralyzed and Crippled in Queens Square, Bloomsbury, which has also a convalescent home where epileptics are received and maintained for a few weeks after they leave the hospital. Most of the charitable institutions refuse to admit them, and charity workers and physicians

find it almost impossible to obtain employment for them. In consequence, those suffering from epileptic seizures soon become utterly discouraged and despondent. It is remarkable that in England, where so much has been done for other suffering classes, especially the insane, so little, as compared with Germany, has been accomplished for epileptics.

Within recent years the National Society for the Employment of Epileptics and the London School Board have directed the attention of the Education Department to the needs of dependent epileptic children, with the result that early in 1897 a committee of this Department was formed to inquire into and report upon the matter. A large number of distinguished specialists were examined, including members of the medical staff of the National Employment Society; its Secretary, G. Penn Gaskell; Mr. Loch, of the Charity Organization Society; and Dr. W. Alexander, of the Maghull Home. A great amount of evidence was taken, and a comprehensive and exhaustive report was made on the subject and presented to both Houses of Parliament in January, 1898. The committee recommended legislation which should place on school boards the obligation to provide for the education and maintenance of that large class of epileptic children whose seizures are so frequent or severe as to prevent their attendance at the ordinary day-schools. It would be left to the school authorities to establish and maintain proper homes of their own or send the children to homes already established, like those at Chalfont St. Peter. This policy is in accord with the views of the National Employment Society. The friends of epileptics are anticipating favorable legislation by the Government on the report of the committee.

Among recent evidences of an awakening interest in

public authorities on behalf of epileptics is the project of the Boards of Guardians of Manchester and Chorlton to establish, on what is known as the Anderton Hall estate, near Chorley, an asylum on the colony plan for harmless epileptics and imbeciles, of whom there are about six hundred in the workhouses of these two unions. The site chosen contains about 237 acres, valued at \$100,000, and is about twenty miles from the two unions. A committee appointed by the joint action of the unions named has visited Germany, Belgium, and France and examined the institutions for the care of the above-mentioned classes in those countries. The Local Government Board has approved the enterprise.

HOME FOR EPILEPTICS, MAGHULL.

The Home for Epileptics at Maghull, about seven miles from Liverpool, in the valley of the Mersey, was the first institution of its kind founded in England. It was established in 1888 through the benefactions of Mr. Henry Cox, of Liverpool, and aid rendered by Dr. William Alexander and others of that city. The work, begun somewhat as an experiment, proved a success, and stimulated efforts in the same direction elsewhere.

The institution occupies a quiet and secluded site adjoining a pleasant park, and about it are neatly trimmed lawns and shade trees. There are but forty-one acres of land connected with the Home, fourteen of which are leased for meadow and grazing. The remainder is used for raising fruit, for gardening, and for recreation grounds.

The building occupied by women is a spacious manor-house, with many large windows having attractive outlooks. This was the nucleus of the institution, to which

other structures have been added, including a large building for men and a hall for concerts and entertainments.

The affairs of the Home are directed by a "Committee," the members of which are elected by subscribers who contribute one guinea or more annually. A contribution of £500 in one sum guarantees the use of a free bed for life. In addition to a local medical officer the medical staff consists of three consulting physicians, an oculist, and a dental surgeon. The establishment is in the immediate charge of a matron. Subordinate to her are two assistants and a staff of women nurses, three of whom are trained. The others are probationers. There is also an outdoor superintendent, with assistants.

At the date of March 4, 1899, there were 121 patients in the Home, 68 of whom were males and 53 females. At the same time 70 applicants were waiting for admission. Epileptics deemed dangerous to themselves or others are not received. Those becoming insane are transferred to an insane asylum or returned to their friends. The Home is supported by voluntary subscriptions and payments for board and care of patients. For those sent by Guardians of the Poor the usual charge is 7*s.* 6*d.* a week. The prices charged to private patients vary according to the accommodations furnished. These are admitted voluntarily and may leave at their discretion. Every effort is made to keep the inmates suitably employed, the managers and medical officers believing this to be all-important. Instruction is given in basket-making to some of the patients, both male and female; and a few of the men work in the joiner's shop. The men are principally employed, however, under the outdoor superintendent at gardening and in looking after the farm stock. The women are mostly occupied with the laundry and domestic work of the two



MANOR HOUSE FOR WOMEN (MAGHULL HOME).



BUILDING FOR MEN (MAGHULL HOME).

buildings and their own sewing, knitting, and fancy work. With few exceptions, and these principally among the newcomers, all the patients do their work willingly.

As a means of amusement, cricket, tennis, bowls, and hockey are freely engaged in during the summer; while music, and bagatelle, whist, chess, draughts, dominoes, and other games, occupy the winter evenings. There are also entertainments every week during the winter, including concerts and magic-lantern exhibitions, which are provided by residents of Liverpool. The patients' minstrel choir furnishes at times musical entertainments, to which the outside friends of the patients are invited.

Religious services are conducted every Sunday, and the spiritual aspirations of the inmates are not neglected.

Respecting the results of treatment in this institution, the physicians say: "We have analyzed the records of all the female patients who have entered the Home since its commencement. The entire number is 108. Ten of these improved so much that the attacks had disappeared at the time of the last record for periods ranging from a month to two years; twenty-four had improved very much, the attacks diminishing by more than fifty per cent. in all of these cases, and in some cases having almost entirely disappeared; thirty-seven improved, the attacks being lessened; in seventeen the number remained stationary; in fourteen the number of attacks increased during their stay at the Home; and six stayed too short a time for any change to take place.

"In thirty-three of the female patients the disease began before the sufferers reached the age of ten years; in thirty-two between the ages of ten and twenty years; in five between the ages of twenty and thirty years; and in three between the ages of thirty and forty years.

“ The statistics seem to show that epilepsy is more persistent and intractable among females than males, but the difference may be due to the fact that female epileptics are not sent to us until they have been a long time ill, as they are not only more amenable to home treatment than males, but parents dislike more to part with them than with the opposite sex.”

At the close of December, 1896, an analysis was also made of the records of 170 male patients who had been admitted to the Home since its opening.

“ In 110 cases that received treatment in the institution the attacks were lessened in number, and in 16 cases the number of attacks increased. Thirty cases remained stationary, and 12 patients died.

“ Of the 110 cases that improved, 53 improved very much indeed, the attacks having practically disappeared. In 27 cases the number of attacks was reduced by one third, in 16 cases the attacks were reduced by one half, and in 10 cases by two thirds of their number.”

In consequence of the constant care and watchfulness exercised over the patients, no serious injuries had occurred and but very few had suffered from bruises.

The medical officers say: “ So far as medicine can relieve the condition the patients are relieved, but not at the expense of health, strength, and happiness, as is exemplified again and again in the miserable wrecks we occasionally receive, whose well-being has been sacrificed and whose lives have been endangered by being dosed by one or other of the quack remedies advertised in the papers.”

An instance is related of “ a boy fourteen years of age, who was, when admitted, very thin and delicate-looking, but without any organic disease. He had been taking a widely advertised remedy for two years, and with it had

four attacks of *grand mal* a month, and twenty of *petit mal* a day. He was nearly poisoned with bromides. On his admission to the Home the quack medicine was of course stopped, and the boy broke down just as an inveterate tippler breaks down when his favorite stimulant is withheld. As soon as the collapse had passed away, the boy recovered, and is now a plump, bright lad."

The medical officers do not apply the word "cured" to their patients until a long period has elapsed after a seizure, deeming the phrase "cessation of attacks," more applicable to their condition.

Dr. Alexander notes that the practical success of the institution, from a medical standpoint, has been abundantly established by its medical records; and furthermore, that the inmates have taken a new interest in life, that a good many have been taught to work regularly, and that all have been made a great deal happier.

NATIONAL SOCIETY FOR THE EMPLOYMENT OF EPILEPTICS.

At a meeting of the Charity Organization Society of London, held July 4, 1890, a special committee was appointed "to consider and report upon the public and charitable provision made for the care and training of feeble-minded, epileptic, deformed, and crippled persons." This committee was composed of representatives of the British Medical Association and of many charitable institutions, together with Poor-Law Guardians, and others specially conversant with this question.

The committee made an extended inquiry into the condition and needs of the classes named, and collected and submitted to the Charity Organization Society a vast amount of valuable information respecting them. The

results of this inquiry were given to the public by the Society through the publications of the "Charity Organization Series." The facts and conclusions submitted by the committee attracted wide attention. Especially did their work bring into strong relief the necessity for further and better provision for persons afflicted with epilepsy. It was estimated that there were upwards of thirty thousand sane epileptics in Great Britain. A particular inquiry made into the circumstances of many of them revealed the fact that large numbers had lost their situations and could find no employment in consequence of their infirmity; that others only occasionally could find brief seasons of employment, and great numbers were obliged to spend their lives in idleness.

As a result of many meetings of the committee, which were attended by leading physicians and others interested in the subject, an executive committee was constituted for the purpose of making an appeal for funds to establish homes where sane epileptics could be provided with employment. On January 25, 1893, a large public meeting was held at the Mansion House, at which the Lord Mayor presided. Addresses were made by the late Sir Andrew Clark, M.D., Sir James Crichton Browne, Mr. C. S. Loch, and others. Sir Andrew Clark, in giving voice to his convictions respecting provision for this class, said: "If we can occupy them in regular work, bring them together in a well-regulated colony which will revive their flagging sympathies, reawaken their affections, and call forth by growth and development all those qualities in men and women which make up our higher life,—if all this can be accomplished, I am convinced, from every conceivable consideration, not only that this work is well worth doing, but that, as a serious duty, it ought to be done."



CHALFONT ST. PETER — GENERAL VIEW.

The following resolution was passed at the meeting :

“ That it is expedient to establish in England a colony for epileptics capable of work, on the same lines, as far as circumstances shall render advisable, as the industrial colonies successfully carried on near Bielefeld in Germany, and elsewhere.”

Following the passage of this resolution numerous liberal subscriptions were announced amounting to £2500. A note was also read from Mr. Passmore Edwards enclosing a check for £1000 as an advance payment towards the purchase of a suitable farm for the proposed colony. Upon this basis the National Society for the Employment of Epileptics was organized.

The Society is governed and controlled by a council having an executive committee and subordinate committees and officers to direct the details of its operations. The members of the council are elected annually by the governors of the Society. The payment of one guinea or upwards yearly to the Society makes the contributor a governor, or the payment of ten guineas or more in one sum a governor for life. “ The object of the Society is to establish homes where persons suffering from epilepsy, yet capable of some occupation, may enjoy the advantages of regular life with healthy surroundings, and where, under the necessary supervision, they may, according to their age, sex, and condition, be educated, industrially trained, or suitably employed.”

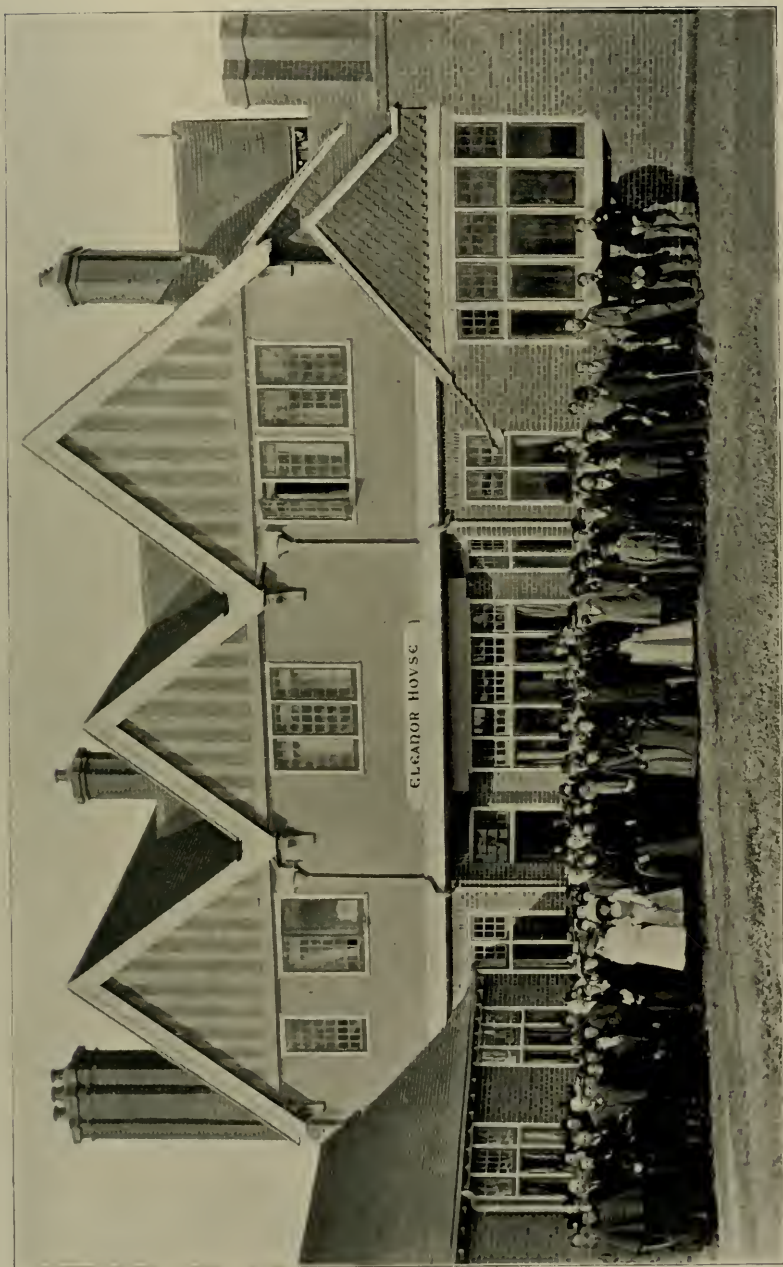
It is intended that the homes shall be supported by payments made by the inmates, their friends, guardians, or poor-law authorities, according to the accommodations furnished; also by the proceeds of industries of the homes and by endowments, bequests, subscriptions, and voluntary contributions. It is hoped that a maintenance fund can

be established, in order that persons unable to make or procure the necessary payments may be supported.

After examining many properties, a farm at Chalfont St. Peter, containing 135 acres, was selected and purchased in 1893. It is situated amidst surroundings of natural beauty, in a salubrious climate, about four hundred feet above sea-level. It is easily accessible from London, from which it is within convenient carting distance for the disposal of produce, and the distance from any large town is sufficient to afford seclusion to the patients. The water-supply is pure and abundant. The soil of the farm is eminently adapted to spade cultivation, even in the wet season of the year, and to fruit-growing and market-gardening. Most of the land belonging to the colony is devoted to farming purposes, but a considerable portion is set apart for fruit-growing, raising vegetables, and for general gardening. One of the first things the managers did after coming into possession of the property was to plant a goodly acreage with fruit trees.

The first building erected at the colony was the Alpha House—an iron structure capable of accommodating eighteen colonists besides the staff-officers. It was completed and other arrangements perfected so that Chalfont St. Peter was opened for patients on August 1, 1894. The following extract from the report of the executive committee presented at the first annual meeting of the governors, May 27, 1895, sets forth the wise policy adopted at the very outset:

“ Our aim in the management of the colony has been to avoid everything which would stamp it with an ‘ institutional ’ character. It will, indeed, at a later stage, when fully developed, not only be, in a certain sense, a hospital and a sanatorium, but it will be far more than this. It will be an industrial village, whose inhabitants, though unhappily afflicted, will be usefully and healthfully occupied,



CHALFONT ST. PETER—ELEANOR HOUSE.
GROUP PARTICIPATING IN THE EXERCISES AT THE OPENING.

and will, as far as possible, follow the avocations of ordinary life. We seek in our little world at Chalfont St. Peter to imitate the great world outside, and our hope is that the colony will grow into a thriving and well-ordered community, where the colonists will be united by ties analogous to those which bind men together as members of a family, as neighbors, and as citizens, with the superadded sense of fellowship arising from the consciousness of their common affliction. With this object in view we began taking only three or four men at first to form the foundation of a family, and receiving others singly or two at a time. Even at the end of the first five months the little home was not quite filled up. This method was an expensive one, but we are far from regretting the cost, for so firm a basis of brotherhood and family feeling has now been laid that this extreme caution will not be necessary in the future."

Before the close of the year 1894 the foundation of a brick building planned to accommodate eighteen colonists and to cost between £1500 and £1600 was laid, and the structure was completed in 1895. It is called, from the name of its founder, the Passmore Edwards House. A brick building was partially erected in 1894 for a workshop and storehouse, upon which some of the colonists were employed in bricklaying, carpentering, painting, and other work. In the early part of 1896, through the generous gift of Mr. Passmore Edwards for the express purpose, a home to accommodate twenty-four women was begun, and finished the following year. Prior to its completion the Victoria House for twenty-four men was begun, and on May 6, 1897, there was a happy manifestation of that co-operative sympathy in human suffering which knows no limitation by oceans or nationalities. To Mr. Bayard was extended the honor of participating in the extension of a

beautiful charity. The last public act of the American Minister before leaving England was the laying of the foundation-stone of the Victoria House. Mrs. Bayard also took part in the interesting ceremonies by opening the women's home and planting an American oak as a memorial. This house is appropriately named the Eleanor House, after Mrs. Passmore Edwards.

A recreation-hall, the gift of a friend, was also completed the same year. This is a building of goodly size, with separate entrances for men and women, and is used for concerts and various kinds of entertainments.

There is nearing completion a small hospital building, in which are two wards for men and women respectively; two single rooms for patients requiring rest and quiet; and two padded rooms, which it has been thought prudent to provide, though it is anticipated that they will be very rarely used.

The following is an enumeration of all the homes, with the capacity of each:

Passmore Edwards House.....	for 18 men.
Victoria House.....	" 24 "
Greene Home.....	" 24 "
Eleanor House	" 24 women.
Milton House.....	" 24 boys.
A Home (not yet named).....	" 24 girls.
Dearmer Home (the little hospital already mentioned), with accommodations for five men and five women.	

In addition to the above homes, there are workshops, a laundry, recreation-hall, farmhouse, and other farm buildings. The laundry, built during the last year, is a well-lighted, airy building of red brick, with tiled roof. It was constructed almost entirely by the patients, working under



CHALFONT ST. PETER.
HALL OF ELEANOR HOUSE, WITH PATIENTS.

the direction of the bailiff. The Alpha House is now used as a kitchen for the whole colony, and also for workshops. The need of additional workshops has long been felt. The managers say: "Hitherto, when the weather has made it unfit to work out-of-doors, it has been difficult to occupy the patients usefully, and there are always some colonists to whom indoor work seems more suitable than field work."

Respecting the needs of epileptic boys fourteen years of age and upwards, for whom limited provision is now made, the committee says: "At an age when most boys begin to earn something, they have to remain at home in idleness, and they have outgrown entirely the control of the mother. The father is usually away all day, and the ordinary result is a course of spoiling and indulgence, induced partly by pity for the afflicted boy, but sometimes by fear of causing a fit. The sight of this over-indulgence as well as of the fits is bad for the younger children. Such boys need a firm hand and patient but absolute discipline to build up the already defective brain and will; but, in fact, they grow up too often quite untrained, and at a critical age, when mind and body are rapidly growing and are liable to take any bent, they live entirely uncontrolled and self-indulgent lives, and destroy—with the aid of those who love them best—any chance of cure, or of keeping the mind sound in spite of the fits. The committee feel that in taking even a few of these cases there will be a most hopeful work accomplished. The daily life of these boys must be different from the routine of the men, and it should include some education as well as suitable training in work. It has, therefore, been considered impossible to take them until they could have a separate home."

The different buildings and departments of the colony are in telephonic communication. The sleeping-rooms are

thoroughly ventilated during the day, as they are occupied only at night. Each dormitory contains nine or twelve beds, and in every house two dormitories are so arranged that an attendant or nurse occupying an adjoining room can overlook both dormitories. This arrangement is thought to be better than the method of having attendants or nurses on regular night duty, as the latter tends in a much greater degree to remind the patients of their affliction. There is a room in each house for those suffering from any temporary ailment. Food is supplied from a general kitchen, and is conveyed to the different houses on hospital trolleys.

The indoor affairs of the colony are directed by a matron, who is a trained nurse. A Sister has charge of each home, and is assisted in the care of the men's homes by a male attendant and in the care of the women's home by a nurse. Some of the Sisters are trained nurses, but previous education as such is not deemed essential. Those untrained are brought under a system of instruction at the institution. The male attendants, in all cases, are retired soldiers, and had no preparation for this special work before entering the colony. A bailiff, who is a builder as well as a farmer, has charge of affairs out-of-doors. A gardener is employed, as are also a few paid laborers.

The means of supplying water to the homes have been improved recently by substituting two oil-engines for horse-power.

The pressure for admission still continues. Under date of March 3, 1899, Secretary Gaskell writes: "The applicants for admission greatly exceed our accommodation, and this is one of our great difficulties, for it results in every candidate having to wait a long time—often two years—before admission, and during this interval, in most instances,



PASSMORE EDWARDS HOUSE (CHALFONT ST. PETER).



VICTORIA HOUSE (CHALFONT ST. PETER).

the malady becomes confirmed and consequently less hopeful from a remedial point of view."

Patients are not committed to the colony by statute, but enter it voluntarily. Insane epileptics are not received, and patients becoming insane are transferred elsewhere.

The present maximum charge for treatment and maintenance is ten shillings a week. This sum is never reduced in poor-law cases, but in all others each applicant is dealt with individually, and if the relatives are unable to afford ten shillings a week, but are willing to do their utmost to pay such amount as they are able, the charge is reduced; and this is done the more readily when local charity interests itself in the case and contributes something towards the maintenance of the applicant, it being, in the opinion of the committee, a matter of the utmost importance to stimulate and encourage local interest in these afflicted cases. There are at present only third-class accommodations, but £5000 have been recently given to the Society by an anonymous donor for the purpose of providing for a few first-class patients.

The dietary is regulated by the matron with the advice of the visiting physicians. Milk produced on the place is liberally supplied, and fruit from the trees now growing is expected to be a helpful factor in the dietary. The use of stimulating liquors is forbidden at the colony, and discountenanced when patients visit their friends.

The usual working-time is about seven hours a day, except during the short days of winter. The time devoted to work in individual cases is subject to the limitation of the physician. It is explained to the colonists on admission that each is expected to perform such kind of work as may be required, including laundering, in case it is not considered prejudicial by the physician. The managers say they

are "more and more convinced of the truth of the Gospel of Work for the colonists; even the relaxation of Christmas and Easter brings an increase of irritability and of fits."

The regulations respecting work are not such as to stand in the way of affording ample opportunities for varied outdoor and indoor recreation.

Church of England service and services of non-conformists are held at the colony weekly, and patients are allowed to attend divine worship in the village near by. It is aimed to afford religious privileges to every inmate of whatever denomination.

The management is to be congratulated upon the wholesome moral influence attending the system of administration. It is asserted that "the good feeling which prevails among the men, notwithstanding occasional bickerings, is indeed the most satisfactory feature of the colony; but in many other respects the progress made is most encouraging. It is particularly pleasing to observe how rapidly, under the influence of improved moral health and new interest in life, the sluggishness and apathy which almost invariably characterize the colonists on arrival are replaced by brightness, energy, and alertness."

In summing up the work at Chalfont St. Peter, one interested in it says that useful, active, social, and, in most cases, happy lives have been made out of lives that were a misery to themselves and a source of suffering to others; and anxious relatives have been enabled, without any loss of self-respect, to place those dear to them in circumstances much more favorable to health and comfort than can ever be possible in the ordinary home circle.

THE MEATH HOME OF COMFORT.

The Meath Home of Comfort was established in 1892.



MEATH HOME OF COMFORT.

The work originated with the Countess of Meath, whose sympathy for epileptics had become deeply aroused by their suffering and neglected condition. In 1890 she visited the celebrated colony near Bielefeld, and, upon her return to England, determined to establish a similar home for women and girls. Eventually the Countess found an old family mansion suitable for her purpose at Godalming, in a beautiful part of Surrey. She purchased the property, repaired the buildings, introduced modern improvements, and furnished the Home completely for about sixty patients. There are now accommodations for upwards of eighty. The grounds about the Home are very attractive, with drives and walks, stretches of carefully kept lawn, and grand old trees.

When everything was ready for the reception of beneficiaries the property was placed in the hands of trustees, and the work of the institution was given in charge of a committee.

The Home was opened with impressive ceremonies, at which the founder gave a short account of the colony near Bielefeld, and made an earnest appeal for the support of the Home, which is sustained by voluntary subscriptions and charges for boarding patients. The inmates are divided into two classes. Those who are accommodated in large dormitories pay at the rate of 12s. 6d. a week; the others pay from £1 1s. to £2 2s. a week, and have greater privileges, including a sitting-room of their own.

Female epileptics between the ages of two and thirty-five years are received. Violent, hysterical, imbecile, or lunatic cases, kleptomaniacs, or those who are insubordinate or of low character are ineligible. The object of the institution is not to provide for those who are in an advanced stage of epilepsy, but rather to afford a happy home for those

whose condition may be improved, or who may possibly be cured, and who are capable of being usefully employed.

The Superintendent is a fully qualified nurse, who is assisted by a staff, all of whom have had hospital training. The children are in charge of a governess.

All the patients are expected to do whatever work the Superintendent may require of them. The two classes meet and work harmoniously together; and when the adults are sitting in the shade of the trees making baskets, or the children are having a good game on the lawn, it is difficult to imagine that they are so sadly afflicted. The fact that constant and varied employment has been devised for the patients has contributed largely to the success of the undertaking. Every inmate is encouraged to take an interest in the Home and share in its duties and responsibilities. Each makes her own bed and assists in the general housework. Some aid in preparing vegetables for the table, some work in the laundry. Many are excellent needlewomen. The variety of plain and fancy needlework, basketwork, and knitted articles made by the inmates of this institution prevents monotony in occupation. The needlework includes the making of women's and children's underwear, aprons, dresses, and hot-water-can cosies. The knitted articles include socks, stockings, gloves, ladies' and boys' vests, petticoats, dish-cloths, and bags for tennis-balls. The basketwork, which is particularly interesting, includes the making of a great variety of covers for glass bottles, flower-baskets, garden-baskets, market-baskets, egg-baskets, waste-paper baskets, work-baskets, knitting-ball baskets, string-baskets, baby-baskets, and table-mats. Moreover, in the Meath Home labor has for its object a higher motive than that of mere occupation. The inmates are charity workers, who interest themselves in many worthy



MEATH HOME OF COMFORT — LAUDERDALE WARD.

outside objects and contribute to the relief of others who are not so unfortunate as themselves. In their spare time and at their own expense they make clothes for destitute children living in the town. Their sympathy for the orphans in the Home for children established by Lady Meath finds expression in many loving acts of kindness. No sooner is it known that the little ones are in need of articles of clothing than willing fingers are busy in the Home of Comfort preparing the necessary garments for them. One little boy forcibly expressed his appreciation of kind attentions bestowed upon him by inmates of the Home of Comfort by calling himself the adopted child of his Meath Home friends; and the Secretary says: "It would probably be impossible to dislodge from his little heart that faith in womanhood which, as the boy grows into the man, is a shield that should be proof against many a fiery dart of danger and distress."

The pretty little chapel, with its well-trained choir, is a noteworthy feature. All concerned in the management being members of the Church of England, the services are necessarily those of that Church, but no patient is excluded from the Home on account of a difference of creed.

Those deeply interested in the work say: "The Home has been conducted thus far without any great difficulty having arisen. Funds have not been lacking, and the institution is, thanks to the payments from patients, almost self-supporting. If no actual cures have been effected, the inmates have experienced the comforts of home life. They have realized there is something even the poor epileptic can do to help on the work there is to be done in the world."

ST. LUKE'S HOME.

At Bournemouth, Carlton Road, there was established so

late as 1895 a small work on behalf of epileptics. At present the Home provides accommodation for ten female patients about the age of sixteen years, who require nursing. The work is under the immediate direction of Deaconess Elizabeth Palmer, a member of the British Royal Nurses' Association, who is assisted by Nurse Margaret Greg, both of whom contribute not only their services, but funds from their private incomes, for the support of the charity. The usual charge for care and nursing is about 12*s.* 6*d.* a week.

CHAPTER IX.

CONTINENTAL COUNTRIES.

IN tracing the origin and progress of organized care of epileptics we find the first movement to have been made in Continental Europe. In making provision for this afflicted class Germany has taken the lead, Prussia especially having made great progress; and it is much to the credit of the German people that, down to 1891, the work had been accomplished largely through Christian benevolence. For information respecting this branch of my subject, I am indebted, among other distinguished authorities, to Dr. Wildermuth of Stuttgart, Dr. Kölle of Zurich, Pastor Siebold of Bielefeld, and Dr. Morel of Ghent.

The establishment of special institutions for the care of epileptics has been brought about during recent years, although isolated efforts in their behalf were made during the last century. In 1773, the Bishop of Würzburg established in connection with the Julius Hospital a home for the protection of poverty-stricken people afflicted with the so-called falling sickness, partly with the hope of cure and partly for the care of those who were incurable. The Bishop's successor continued this humane work and cared for many epileptics at his personal expense. In 1845, a separate building was erected for them with accommodations for forty-eight free patients. A German princess, Pauline von Lippe Detwold, about the year 1810 extended her

philanthropy to caring for epileptics, and recorded her experience in favor of the agricultural system. A royal decree of the Bavarian Government in 1819 directed the founding of an asylum for this class of sufferers, but the decree was never carried out.

Asylum care for epileptics may be said to have developed from about the year 1838, contemporaneously with the effort put forth by that eminent philanthropist, Dr. Edwin Seguin, of Paris, to educate the idiot class. Thereafter, in the numerous asylums that were provided for idiots, epileptics were generally received, more especially the young.

A memorable event was the making of provision on the cottage and colony plan for epileptics at Laforce in France. In 1846 John Bost returned to Laforce with the means which he had solicited in France and England to aid in the establishment of a home for dependent children in connection with the Protestant church of which he had been recently chosen pastor. His parishioners, though poor in purse, aided him with their labor, and in 1848 a cottage was opened with accommodations for fifty homeless girls. Not only dependent children surrounded by evil influences, but children of all conditions of bodily and mental weakness, were sent to him for care, and gradually cottage homes were provided for various classes of sufferers. Pastor Bost's efforts to raise means to carry on his work were courageous and persistent. Liberal contributions were made to aid his charities, but it required considerable sums to meet the expenses of his continually widening enterprise, and he was constantly in straitened circumstances, with his sympathies strained by numerous applications for admittance to his homes. The pathetic story of the origin of the department for epileptics is thus told by De Liefde:

“ It happened one day that a carriage stopped before the

door of one of the establishments. Mr. Bost walked out to meet the unexpected visitor. It was a gentleman who brought an epileptic son. 'Dear sir,' he said to Mr. Bost, 'it is only three days since I heard of the existence of your establishment, and I immediately set out with my poor boy, for whom I could find no place; but he is in the right place now, I trust, and you will make me one of the happiest of fathers.'

"The stranger produced letters of introduction and recommendation; and the joyful expression of his face indicated how happy he felt at having at length discovered an establishment which could take his child.

"'But, my dear sir,' Mr. Bost replied, 'I am sorry to disappoint you. I cannot possibly take your son. He is an epileptic, you say; and I have no establishment for such patients.'

"The conversation which ensued was very touching. The poor father took both Mr. Bost's hands, and besought him, with tears, to have mercy upon his miserable boy. Mr. Bost's feelings for the moment threatened to get the better of him; but common sense resumed the reins, and plainly told him that he was about to commit a folly. Father and son both left, overwhelmed with grief; but the carriage had advanced but a short distance when the poor man again jumped out, and in a voice indicative of the deepest affliction again entreated Mr. Bost for Heaven's sake to yield. Mr. Bost once more had strength to keep inexorable; but no sooner had the carriage disappeared than he burst into tears. The saying of that poor father in the Gospel occurred to his mind: 'I have brought him to Thy disciples, and they could not cure him.' 'And I,' he thought, 'have not only not tried to cure him, but have not even given him any solace.' "

Subsequently there came another appeal in the form of the following letter:

“ It is in the name of the *Chambre de Charité* of N—— that I take the liberty of inquiring whether you would consent to admit to your establishment an unfortunate boy, with whom we do not know what to do; since in him there are so many miseries and infirmities combined that not one of the public institutions to which we have applied will consent to take charge of him. He is a boy of ten. Owing to disease he has totally lost his hearing. One of his eyes is also completely lost; and he has only a partial use of the other, since little spots dim the sight. Moreover, he is subject to nervous epileptic fits, and sometimes to maniac violence. His speech begins to become more and more unintelligible,” etc.

The sympathetic heart of Pastor Bost could not withstand such appeals, and he resolved to add to his evangelical and philanthropic work the care of epileptics, which he did by opening a cottage for boys of this class in 1862, about two miles from the other houses. Suitable provision was also made for epileptic girls in a cottage forming part of the original group of buildings. The last house built by him was erected in 1881. The whole formed a group of families who lived as nearly as possible like families in ordinary homes. Pastor Bost, while favoring the use of medicine, believed in the efficacy of outdoor life in the country in healing certain diseases; in the advantages of working in the fields and garden, of caring for animals, and of the contemplation of the works of nature. In one of his reports he said:

“ I never visit the hospitals in our great cities without a feeling of distress. . . . I will tell you what is wanting: the country air, the fragrance of the flowers and of the

earth, the morning dew, which is more refreshing than many baths taken in town or even in rivers. What is wanting is the beautiful rays of the sun, the harmony of nature, the carol and warbling of birds, so adapted to cheer those hearts broken by suffering."

From these homes for epileptics, which form a part of the mixed colony founded by Pastor Bost at Laforce, came the first practical realization of colonizing this class of sufferers and caring for them in family groups.

In 1855, Dr. Reimer founded an asylum in Görlitz, Silesia, exclusively for epileptics, which was used later for mental diseases in general.

At Tain, in the Département de la Drôme, France, there is the "Asile de la Teppe" conducted under the auspices of the Society of Saint Vincent de Paul, where the patients live a family life resembling that at Laforce. The institution possesses an extensive estate on the banks of the Rhone. The origin of this useful charity was somewhat similar to that for the insane at Gheel. For two centuries epileptics had been attracted to La Teppe every May and September, at the time of the new moon, to receive from the Larnage family the gift of a supposed remedy made from *Galium album*, a plant growing in that locality. This custom led to the founding in 1857, by the Comte de Larnage, of the Asile de la Teppe for sane epileptics of both sexes. There are gathered here between two hundred and three hundred patients, including children from Paris. The city extends aid to the Society, as do some of the Departments.

There was opened in 1862, in Wurtemberg, near Lake Constance an institution for persons afflicted with epilepsy. In 1866 an asylum, projected by the Southwest Conference of Inner Missions, was established at Stetten, Wurtemberg, in connection with that for idiots. In 1893 it

contained 200 epileptics. Previous to 1890 it had received 747 patients. The care of epileptics in the Kingdom of Wurtemberg is conducted altogether by private asylums of a denominational character, the State contributing largely towards their support.

In 1867 was founded the celebrated colony of Bethel near Bielefeld, under the auspices of the Provincial Committee of the Inner Mission, which, under Pastor von Bodelschwingh, has had a marvellous development.

Between 1867 and 1890 a number of institutions for epileptics were established, some for their separate care and others in connection with idiot asylums. The institution founded at Königswartha, in the Kingdom of Saxony, in the year 1877 was turned to another purpose in 1882, its place being filled by the Hochweitschein Asylum, which now contains upwards of 600 patients, including children. Among others may be mentioned the asylum "Kreuzhilfe," which was opened in 1877; the asylum for epileptics in Rotenburg, in the province of Hanover, established in 1880, which comprises seven houses with accommodations for nearly 300 epileptics; the asylum "Mariahilf," at Tilbeck, in Westphalia, established for children in 1881, under Roman Catholic direction, and now containing about 200 women and children; the asylum "Karlshof" at Rastenburg in East Prussia, founded in 1882, for epileptics of both sexes. At Stettin in Pomerania the epileptic asylum "Tabor" was established in 1882. Something more than two years ago it contained nearly 250 patients. There is an asylum at Rath near Dusseldorf, which was opened in 1883. It is conducted under Roman Catholic auspices, and contains upwards of 100 women. The home of the Alexianer Brothers at Aix-la-Chapelle, containing 200 patients, was opened the same year, and the work has

been extended by creating a branch near the city. A home established by the Franciscans was opened at Olpe, Westphalia, in 1884, for epileptic children. St. Valentine's Home in Kiedrich, Hesse-Nassau, was opened in 1886 for female epileptics. The same year there was established at Potsdam, in the province of Brandenburg, an asylum for those suffering from epilepsy, which now has accommodations for about 275 patients. In 1893, it came under the charge of the province.

Among the institutions established in Continental Europe during the past fifteen years deserving special attention as illustrating advanced ideas of the German methods of caring for epileptics, are the Swiss Asylum at Zurich, the city of Berlin asylum, "Wuhlgarten," and the Uchtsprunge government asylum in Saxony. The Swiss Asylum, in the projection of which there was a practical utilization of a vast amount of previously acquired experience, was founded in 1886; "Wuhlgarten," elsewhere described, was opened in 1893; and the large asylum of Uchtsprunge, near Neinstedt, in 1894.

Though Germany is in advance of other countries in making provision for epileptics, even there the accommodations for this class are far from being sufficient. Most of the work in this direction has been undertaken by private organizations directed by religious societies, the Government in some instances lending liberal aid. Only in the kingdoms of Prussia and Saxony has the Government taken in hand the establishing of institutions for epileptics. In Saxony State care has existed for a considerable time. Systematic government care was guaranteed to epileptics in Prussia by a law passed in 1891. This important measure made it obligatory upon the Poor Law authorities to provide, after April 1, 1893, asylum care for such of the dependent insane,

epileptics, the deaf and dumb, and the blind, as required it. In carrying out this law, so far as it affects epileptics, the existing asylums of Prussia for epileptics and idiots have been brought into requisition and new institutions have been built, are in process of construction, or are projected.

Besides institutions in Germany and France, the following may be mentioned: In Italy there is an asylum at Bergamo. There is a small one in Russia, near St. Petersburg, which is conducted under evangelical auspices. One of the several departments of the institution for feeble-minded at Copenhagen, in Denmark, is in the outskirts of the city and is devoted to epileptics. A small work was begun at Christiania, in Norway, in 1883, also at Wilhelmsro, in Sweden, in 1892. At Haarlem, in Holland, a work for epileptics is carried on in what is called the Christian Home, under the direction of deaconesses. Seventy women are provided for in two buildings called Sarepta and Bethesda, the garden and grounds of which are enclosed by a wall. Under the same board of management are three houses in the country containing about seventy-five male patients, who are cared for by deacons. The institution receives but few except private patients. These are divided into four classes, paying from \$120 to \$500 yearly. Children are admitted at lower rates. The receipts of the Home fall considerably short of its expenditures. The deficits are met by voluntary contributions.

WUHLGARTEN.

An important step affecting the welfare of epileptics has been taken by the establishment of the Wuhlgarten Asylum at Biesdorf, near Berlin. Previous to the creation of this institution it had become manifest that further extension of facilities for the care of the insane of Berlin was necessary.

Instead of building a new asylum for them, it was decided to develop a plan for the separate treatment of epileptics, large numbers of whom, designated by the statute as incompetent persons, were confined in the asylum for the insane at Dalldorf. By removing these the desired accommodation for the insane would be provided. The question of separating the care of epileptics from that of the insane had been long discussed in various societies of alienists, and the desire to put in practical operation this principle in Berlin had its influence in establishing the Wuhlgarten Asylum. The erection of buildings was begun in 1890, and the institution was opened for patients in November, 1893, at which time, or soon thereafter, the epileptics from the insane asylum at Dalldorf were admitted. Wuhlgarten is supported by the city, and its affairs are directed by the same Board that controls and directs the city institutions for the insane. The Board reports to the city magistrates. The asylum is in the immediate charge of a medical director, Dr. Hebold, who is also Superintendent.

The institution was first planned for 500 patients, with the possibility of increasing its accommodations to 1000. It was finally constructed to accommodate 1100; that is to say, 500 each of men and women, and 50 each of boys and girls. It was thought that there would be about an equal number of the sexes, but there proved to be a preponderance of males. At the date of February 28, 1898, there were 913 patients under care; 524 of these were men, 54 were boys, 301 were women, and 34 were girls. The property of the asylum includes only about 222 acres, 105 of which are devoted to agricultural purposes, 28 to meadow, and the remainder is occupied with buildings, or taken up with ornamental and recreation grounds and a small lake.

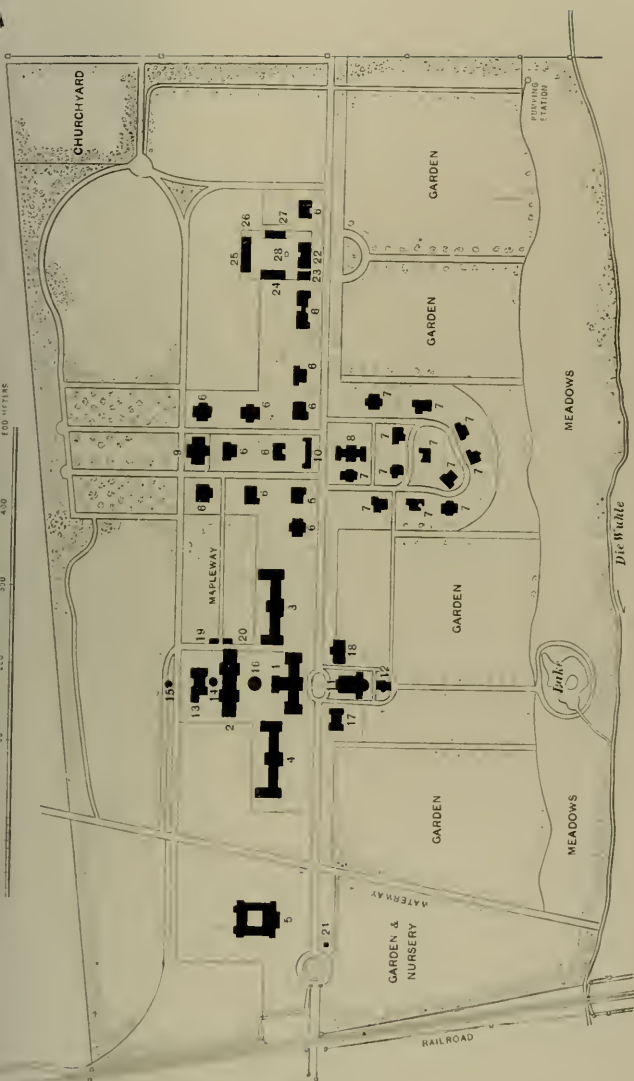
Notwithstanding Wuhlgarten is built somewhat after the

cottage plan, about all its departments there is a seeming lack of outdoor space and freedom, which are desirable in an institution of this kind. The administration building contains the office, consultation-room, library, pharmacy, several rooms for the assistant physicians, and halls for entertainments. The chapel is situated opposite the administration building, and in the rear of it is the mortuary. The house of the Director stands at one side of the chapel, and that occupied by other officers of the institution on the opposite side. Back of the administration building is the domestic department, containing the kitchen, laundry, storeroom, the offices for the superintendents of industrial work and farming, and the servants' quarters.

In the rear of the domestic department is the powerhouse, in which are ten boilers for generating steam, two dynamos, and a storage battery for the electric-light system. Water is supplied from the city water works. There is a steam force-pump for protection against fire. The buildings are warmed by a central heating plant.

Near the entrance to the grounds, at the left, is the department for children. Here reside the superintendent of education and two male and two female teachers. The ground floor is divided into schoolrooms. In the upper story are the bedrooms, and a large dining- and assembly-room. The sleeping-rooms for the boys are in a separate wing from those for the girls. There are also in this building a large gymnasium, a medical consulting room, and workrooms for children.

In planning the buildings for adult patients the aim was kept in view of permitting as much liberty of action to those occupying them as practicable, but it was thought that about 120 out of 500 would require restricted treatment. For these there were erected, on either side of the administra-



- | | | | |
|-----------------------------|-------------------|------------------------|--------------------|
| 1 Administration Building. | 8 Bath House. | 15 Water Tower. | 22 Dwelling House. |
| 2 Domestic Department. | 9 Workshop. | 16 Ice House. | 23 Plant House. |
| 3 Asylum House for Men. | 10 Bowling Alley. | 17 Director's House. | 24 Horse Stable. |
| 4 Asylum House for Women. | 11 Chapel. | 18 House for Officers. | 25 Cow Stable. |
| 5 Children's House. | 12 Mortuary. | 19 Fire Engine House. | 26 Carriage House. |
| 6 Country Houses for Men. | 13 Power House. | 20 Wagon House. | 27 Piggery. |
| 7 Country Houses for Women. | 14 Chimney. | 21 Porter's House. | 28 Hennerly. |

ASYLUM FOR EPILEPTICS, WUHLGARTEN, NEAR BIESDORF, GERMANY.

tion building, two separate houses—one for each sex—modelled after the departments of insane asylums caring for a similar class of patients. The most serious cases, including the bedridden, restless, maniacal, and dangerous, are here provided for. In each of these houses are eight cells or rooms which are locked when occupied. There are also reception-rooms where new arrivals are kept under observation until the condition of each has been fully determined. Dr. Hebold has given the result of his experience with these buildings in the following language:

“ We have found it to be a great disadvantage that all the dangerous and unmanageable patients are thus brought together under one roof. Among epileptics there is a large number of degenerates—of those whose fate is sealed before their birth—given to quarrelling and fighting, to forming plots and to vicious practices, such as pederasty and mutual onanism. These patients are entirely lawless and criminal. As long as they live indoors they are to a certain extent kept separated in four or five different divisions, but in the yard they meet without restriction. A certain relief is afforded by our ability to transfer extremely vicious insane epileptics who have withstood all treatment to one of the two insane asylums which have a separate division for each sex.”

The great majority of the patients live in so-called cottages, of which there are twelve for males and a like number for females. These differ in no way from ordinary dwelling-houses and are variously planned to accommodate twenty, thirty, or forty patients. On the lower floor are the sitting-rooms and on the upper the bedrooms. In some of the cottages there are also bedrooms downstairs. Three of these buildings are arranged as infirmaries—two for men and one for women. They are designed to meet the emergency of

short periods of illness only, and are not adapted to the care of bedridden patients, as they lack bathing facilities. Baths are taken in the bath-house, which stands in the centre of the space occupied by the cottages. Three rooms in the infirmaries are arranged for patients suffering from unforeseen temporary attacks of excitement.

In the spring of 1898 the men were employed as follows: 107 about the gardens, fields, grounds, and stables; 69 as house laborers; 16 in clerical work; 2 as house-fathers; one as a maker of seltzer water; 8 as laborers; 11 at shoe-making; 10 at tailoring; 3 at bookbinding; one at upholstering; 15 at hair-picking; 10 at carpentering; 4 at basket-making; 7 at brush-making; 33 as straw-plaiters. The women were engaged as follows: 20 at housework; 67 at sewing; 64 at mattress-making, mending, and knitting; and 20 in the kitchen.

In the way of entertainment much attention is given to music. There are occasional stereopticon exhibitions, theatrical performances, frequent dances, bowling, and other amusements.

The education is on the same lines as that of the common schools of Prussia.

The charge for private patients admitted from the city of Berlin, provided there is room for such, is two marks a day.

The medical service of the asylum is directed by Dr. Hebold and his five assistants. The former gives special attention to the building for the insane and the vicious males. Two of the assistants are assigned to the cottages for men and one to those for women. The first assistant oversees the children's home and the second that for insane and vicious females. Daily rounds are made by the medical director, who visits all the different departments, and a daily meeting is held of all the physicians for consultation

and for the purpose of attaining unity in methods of treatment. Of the system of treatment Dr. Hebold says:

“ Since our belief, founded upon clinical experience, that epilepsy is a hereditary and permanent disease, is verified by anatomic investigation, we must not expect too much from treatment. If we overcome the convulsive seizures we have achieved a result worthy of effort, but it will always be self-deception to consider this a cure. The fundamental structure remains the same, and there is always danger of a recurrence of attacks. Altered and diseased tissues cannot be made normal. We must strive for an improvement of the longest possible duration. Of this improvement the cessation of attacks, if the mental state continues clear, is an outward sign. To effect this the patient must give his co-operation by thoroughly mastering the rules of treatment prescribed by the institution.

“ Our methods do not differ from those ordinarily employed. We lay the greatest stress upon the management of the daily life, all excesses being rigidly avoided. Out-of-door work and farming are of great value. Mechanics are given an opportunity for employment in pleasant, roomy workshops. It is necessary to consider the inclinations of the patients.

“ In regard to the food, I would mention that it is not too heavy. We try to provide meat and vegetables in proper relative quantity and in desirable variety. We believe experiments with any particular form of diet with the aim of proving its special therapeutic value to be disadvantageous, and not even of theoretic interest. Moderation in diet is, however, of great importance, especially in regard to alcoholic beverages. We have entirely discontinued the use of beer, and are well satisfied with the beneficial effects of entire abstinence from alcohol.

“ Our medical treatment is the usual one. The bromides are most extensively employed ; other drugs are occasionally tried, but we always return to the old standbys. We are unable to say much in praise of the Flechsig treatment. For the *status epilepticus* chloral hydrate alone is of much value. States of excitement and apprehension demand sedatives. Besides the narcotics we make use of hydrotherapy in the form of prolonged tepid baths, wet packs, and cold ablutions.”

SWITZERLAND.

In the Republic of Switzerland there are three asylums for epileptics; one at Zurich, one at Rolle, and one at Schloss Tschugg. All of these institutions are governed by private benevolent organizations, and are under the supervision of the Government. They are supported by voluntary contributions, by aid received from the cantons, and by payments from patients for board.

About seventy-five per cent. of the inmates belong to the dependent class, and for these the home parishes pay three hundred francs per capita annually, which is about one half the cost of care. Private patients pay, according to the accommodations afforded, from four hundred to nine hundred francs; and in a very few cases as high as three thousand francs have been received.

The asylums at Rolle and Schloss Tschugg have each two buildings. At the close of the year 1895 the former had 2 male and 16 female patients, and the latter had 34 male and 38 female patients. At Zurich there are three buildings,—one having a capacity for 55 children, another for 75 women, and a third for 20 men. In addition, a new building will soon be ready to accommodate 75 male adults, and the erection of a hospital is in contemplation. It is intended that the asylum shall eventually provide for from 300



INSTITUTION FOR EPILEPTICS, ZURICH, SWITZERLAND.

to 400 patients. Insane epileptics are not received, and such as become permanently deranged are transferred to insane asylums.

The asylum at Zurich was founded in 1886 by a society whose members belonged to the different cantons of the country and by a committee of men and women of Zurich. The management is vested in the Director, the physician in charge, and the pastor of the institution. During its existence about one thousand persons have applied for admission, but not more than half of the applicants could be received. Dr. Kölle has been Director of the Swiss institution from its foundation, and to his experience of more than thirty-five years in the care of epileptics is due much of the success that has attended the work.

The asylum owns about twenty-five acres of land. Two and one half acres are set apart for gardens and about two acres for vineyards.

The men are employed on the farm, in the gardens and vineyards, at the carpenter's bench, at tailoring, and in the binding of books. They also make carpets and shoes and do basket-work. The adult female patients do various kinds of women's handiwork—embroidery, general sewing, and the regular work of the household. Employment is provided for each one, for the epileptic asylum at Zurich has no place for the idle.

The boys are classified in two divisions, as are also the girls. The women form eight divisions and the men two. In addition to these regular patients there are also in each of the three houses a few patients of the first class, who have special accommodations and attendance.

The children receive instruction from two male and two female teachers. There are two educational departments—the school proper, for normally intelligent pupils and the

moderately feeble-minded epileptics; and the preparatory school, for the decidedly feeble-minded epileptics. The course of study is somewhat as follows:

The pupils of the preparatory school are instructed in Bible history, reading and writing, arithmetic, drawing according to Froebel, gymnastics, and manual training, including sewing and weaving.

In teaching Bible history the simplest tales of the Old and New Testaments are illustrated by means of pictures, and the children commit to memory psalms and verses easy to learn. The lessons in reading and writing are very simple. There is special speech practice for stammerers. In arithmetic there are exercises in addition and subtraction with numbers from one to five, in which many means of illustration are employed. The gymnastics include ordinary walking, marching, and exercises for arms, legs, shoulders, and head.

In the lower department of the school proper there are taught Bible history, language, arithmetic, writing, and drawing according to Froebel's system. In language study there are three divisions. The pupils read from the school reader, study nouns, verbs, and adjectives, and practise easy composition in connection with illustrative teaching. They are also given verbal and written exercises. In arithmetic there are also three divisions. In object teaching there are discussions of familiar objects, such as flowers, fruits, household articles, and animals shown in pictures. Writing lessons include capitals as well as small letters and German and Latin script.

For the higher classes, instruction in the foregoing branches is continued, and the pupils also enter upon the study of natural history and geography. In the Bible classes the memorizing of psalms and verses is

continued, and the subjects under consideration are the life of Jesus, Baptism, Christian dogma, Our Father, the Ten Commandments, and the Sacrament. In language there are two divisions. The exercises in Class A include reading, reciting stories, committing to memory a poem occasionally, writing a composition once a week, and parsing. There are also frequent dictation lessons.

The pupils of Class B read from the school reader, study pronouns, prepositions, past, present, and future tenses, and write compositions. Simple selections are read and discussed and made subjects of composition, and dictation exercises are given.

In arithmetic, the members of Class A review previous work and study the subject of interest; Class B has before it the application of general principles, interest, etc., and Class C, addition, subtraction, multiplication, and division.

In summer the pupils of the natural history class study different plants; and in winter birds and insects.

In geography there are three divisions; in history local wars are made subjects of study; linear drawing is taught; also the singing of two- and three-part songs and chorals.

All the adult female patients who are able to comprehend the subject are admitted to the class in Bible history.

In order to avoid over-exertion on the part of pupils, Dr. Kölle recommends that the daily lessons should not continue longer than from three to five hours, with recesses. On the other hand, he says that long vacations are no less to be avoided; and that the patients should never be permitted to be entirely idle even in recreation hours, as idleness leads to brooding. Respecting the benefits of intellectual training to the epileptic, Dr. Kölle says: "We believe it to be entirely a mistake to consider lessons as equivalent to excitement; on the contrary, if they are carried on in an

interesting, animated way, we must welcome them as a help to the epileptic, as we do all influences which tend to lift him out of his brooding moods, his mental dulness, and apathy. I know many an epileptic pupil who, thanks to good teaching, enjoys a simple but rich spiritual life. Instruction in singing, as in drawing, must be considered as especially stimulating, and therefore as valuable. In the latter branch the writer gives preference to linear drawing in colors, which pleases and interests the children. In this the pupils, who often remain but a comparatively short time in the institution, show satisfactory progress." Epileptic children are not allowed to practise upon the piano or the violin, as the peculiar exercise involved in so doing tends to bring on an attack.

At the Zurich Asylum three principal meals are served—at 7 A.M., 12 M., and 7 P.M. At mid-forenoon a lunch consisting of bread and fruit or milk is allowed, and at mid-afternoon bread with milk or weak coffee is given. Milk and eggs are considered desirable nourishment. The use of alcohol is not permitted.

As to the efficacy of the treatment, Dr. Kölle says that it is difficult to give figures, though the general results are positive. He estimates that about ten per cent. are cured and forty per cent. improved.

BETHEL COLONY NEAR BIELEFELD.

Divine love glowing in the hearts of a devoted band of men and women working in the shadows of the Westphalian mountains has so illumined the world as to attract philanthropists from all civilized countries to that hallowed spot, to study a unique phase of charity. The colony at Bielefeld has been so many times particularly described by various writers that it seems unnecessary to add little else than



BETHEL COLONY FOR EPILEPTICS, NEAR BIELEFELD, GERMANY.

information respecting the present status of the work, obtained mainly from official sources by recent correspondence.

The institution, established by the Provincial Committee of the Inner Mission in Rhineland and Westphalia, is situated on the outskirts of Bielefeld, a city in the province of Westphalia, Germany, having about fifty thousand inhabitants. On the 1st of July, 1898, the settlement contained, with its officers, physicians, nurses, and employees, about 3500 persons. The colony, lying mainly in a pleasant valley, embraces a great variety of residences surrounded by gardens and hedges, shops for artisans of various trades, places of worship, meadow-lands, and groves. On an eminence overlooking the colony there looms up in striking contrast the ancient castle of Sparrenburg, whose massive ruined walls speak of a more selfish age, when the world was ruled by might, and might made right.

The Bethel Colony is an evangelical, charitable institution, differing in its management and development from any other establishment. The work was begun upon a small farm in 1867. The simple exercises connected with the opening of the farmhouse included the offering of prayer by the venerable pastor, who knelt in the parlor with four patients and asked God's blessing upon the undertaking. In 1872, Friedrich von Bodelschwingh, a Protestant clergyman, ignoring the prestige of an aristocratic title, gave up court life and the companionship of the German nobility, to devote his life to the building up of this hospital and home for neglected epileptics. When he assumed his duties there were twenty-four male patients at Ebenezer, as the farmhouse was called where the work was formally begun. A large building, planned to accommodate two hundred patients, was in process of erection. This was afterwards

completed, although disapproved of by Pastor von Bodelschwingh as not in accord with a true colony plan. He wisely desired that the patients should be distributed in small family groups, and this policy was adopted in the future development of the institution. The large building was called Bethel, a name gradually applied to the whole colony.

To the small original farm have been added from time to time tracts of land varying in size until the estate now comprises about three thousand acres. As opportunity offered, other benevolent work was undertaken, which has proved far-reaching and beneficent in its results. This includes, among other enterprises, saving efforts in behalf of children, not only such as are epileptic, but the homeless and the enfeebled and the crippled, the establishment of the Workman's Home, and the branch labor colonies of Wilhelmsdorf and Freistatt. The most important work of this broad charity, however, is now, as it was at the outset, the care of epileptics, who numbered 1516, including children, on the 1st of July, 1898.

Of the 1691 patients cared for during the year 1897, there were from Westphalia 390, from the Rhine Province 389, from Hanover 257, from Schleswig-Holstein 179, from the government district Cassel 100, from the government district Wiesbaden 78, from the Grand Duchy of Hesse 65. The remainder were from other provinces, states, and countries, including eight from America, four from England, three from the Netherlands, two from Sweden and Norway, two from Denmark, two from Switzerland, six from Russia, and four from Africa. The creed of most of the patients is evangelical, less than three per cent. being Roman Catholics, Israelites, and of other faiths.

The patients at the Bethel Colony on the 1st of January,



PASTOR VON BODELSCHWINGH WITH THEOLOGICAL CANDIDATES.

1897, numbered 1441. There were 663 men, 550 women, and 228 children under fifteen years of age, of whom 123 were boys and 105 were girls. During the year 250 patients were received and 199 were discharged.

The records showed that 166,663 fits occurred during the year, 84,865 of which were reported as serious attacks, 8580 as light, and 73,218 as quite short attacks of epileptic dizziness. A great number of fits are not noted, as they occur at night and are unobserved; and throughout the day and night light attacks, and attacks of dizziness while at labor, are regarded as not severe enough to be noted. Of persons thus afflicted, however, there are not a great number, as experience has proved that for the most part only those very sick and who have for years suffered from epilepsy are given over to the asylum. All the efforts made by the colony officials to have epileptics brought under early treatment have proved futile through lack of judgment in parents or guardians, who see in the asylum only an ultimate refuge and place of last resort; and precious time is lost in vain attempts to cure before sending the sick one out of the family. The managers appeal to all interested in the welfare of epileptics to enlighten the public as to the necessity of early commitment to asylum care.

The entire number of patients received in the colony since its establishment down to January 1, 1898, was 5028. Of these, 388, or 7.7 per cent., were discharged as cured; 1099, or 21.2 per cent., as improved; 1058, or 21 per cent., as not cured; and 991, or 19.7 per cent., died. It is said that about 61 per cent. of those who were discharged as cured were under eighteen years of age. As but a little over one third of the entire number of patients were under eighteen years of age, the figures show how small a proportion above that age were cured. A patient is not regarded

as permanently cured until the lapse of four years without an attack. If two years pass without a seizure he is discharged from the institution, but is not regarded as cured if he has an attack during the two years following his discharge.

Dr. Warnek designates as temporarily cured all those who for a year's time have not had an attack. He says: "We can be satisfied with this result when we take into account the severity of the suffering and the long continuance of the illness of the patients before entering the institution. Without our help these would have fallen into greater suffering. Our medical treatment preserves from falling; that is to say, we keep the patient from swiftly descending into weak-mindedness and idiocy and retain him for years in a state in which he can contribute something to the common weal."

Respecting the mental condition of the patients, it is officially stated that of the 5028 received into the asylum only 47 have been turned over to insane asylums; and on the 1st of January, 1898, there were but 13 male and 12 female patients in the closed departments for cases suffering from temporary mental derangement. At that time 25 per cent. of the patients were without any perceptible mind disease; 33 per cent. had only slight defects of mind; 17 per cent. were classed as mentally disturbed; and 25 per cent. as imbecile.

In regard to the length of life of epileptics, Dr. Warnek says: "We find confirmed the old experience that epileptics in general do not attain an old age and that a large majority perish, not from ordinary sickness, but from the consequences of epilepsy." Of 68 patients who died in 1895, five were under ten years of age, 13 under twenty years, 18 under thirty years, 15 under forty years, 13 under fifty years, one under sixty years, and three under seventy years.



A BAND OF BETHEL COLONY WORKERS.
SISTERS OF BETHANY.

As to hereditary influences, the experience at Bethel proves that they are the most potent factors in the disease of epilepsy. The decrease of tuberculosis in the institution is attributed to the practice of isolating tuberculosis patients and thereby lessening the danger of communicating the disease to others.

The necessity for trained nurses and the difficulty experienced in securing those actuated by a philanthropic spirit led to the establishment in 1869 of the Westphalian Mother-house of Deaconesses as one of the departments of the colony. In this department, called Sarepta, girls and young women are trained to become nurses, teachers of the young, and, in fact, to be ready to undertake whatever circumstances may demand in their sphere of work. At the head of Sarepta, besides two clergymen, are a deaconess-mother and a probation-mistress for the training of the probation sisters. All those desiring to undertake the duties of an evangelical sister are informed by letter that the life of a deaconess is one of daily self-sacrifice for others. A few words from the letter addressed to each applicant are sufficient to show the spirit in which she is expected to enter upon her duties: "Whoever would come to us in order to make a name for herself and to seek earthly honors; whoever would come for the sake of being provided for and without love for the work, would lack strength of endurance and be in danger of suffering injury to her soul. But whoever, after earnest self-examination, believes to see the will of God and His guiding hand, and sets her hope in a merciful God and His help, and desires to enter the work in that spirit, she will learn that, although life spent in the service and imitation of the Master in this work is full of weariness, it is also full of joy."

The age of applicants may range from eighteen to forty

years. They must possess good physical health and an unblemished reputation. The necessary degree of education is shown by an account of the applicant's life written by herself. Young women who are found eligible enter the so-called "ante-probationary" class and work for a time in the mother-house without distinctive dress. If it is thought during this period that they are suited for the Sisterhood, they are given the cap of a probation sister on the occasion of one of the monthly "Sisterhood Days." The period of probation lasts usually at least one year, during which the probationers receive only free board and lodging. After this time, if there is good reason to believe them equal to the duties of full sisterhood, they are admitted into the class of Assistant Sisters. From that time they are provided with clothing and pocket-money. They are also sent to other homes for further practical training. As a rule, they are recalled in the fourth or fifth year to the mother-house, in order that they may receive instruction in any department of work in which their training may have been deficient. They usually do not obtain full sisterhood until five years have been passed in the service of the order, and never until the completion of their twenty-fifth year. The admission into the Sisterhood is consecrated by a special church service, and occurs at the time of the annual celebration in the mother-house.

In the formation of unselfish Christian character and the development of useful talent, Sarepta has been eminently successful. With an education diverse in its application, the monotony incident to the routine of a particular line of duties is not experienced; but relaxation and renewed vigor are often derived from a change of occupation. Of the hundreds of sisters educated at Sarepta many are now in other useful fields of labor in Germany and foreign lands.



As a complement to the mother-house, Nazareth, the home of the deacons, was established in 1877. The deacons are educated as nurses and evangelists, and may be carpenters, blacksmiths, or farmers; or they may have other trades or occupations. If their services are not required at Bethel or the colonies connected therewith, they are sent to other homes and to foreign mission fields.

There are eleven medical men—seven chief physicians and four assistants—and six pastors connected with the colony. Pastor von Bodelschwingh says: “The physician takes upon himself a regular medical treatment, and a conscientious personnel of house-parents, brothers, and sisters, with all their ability, carry out his dietetic and medical prescriptions.”

Stress is laid upon the desirability of classifying the patients into single family groups, of open-air labor, healthful food, regular exercise, and personal cleanliness. The inmates are separated into 120 families with from ten to twenty in a family. These are distributed in upwards of fifty houses; many of the houses containing but one family, a few of the dwellings containing several groups. The care of these requires a personnel of about 70 house-parents, 84 deacons, 69 deaconesses, and 19 assistants. There is an average of one nurse to between seven and eight patients. The house-parents live with the patients, working with them and superintending the domestic affairs with diligence and devotion. They show the patients how to perform their tasks, and are to them friend, brother, sister, even father and mother. The home element is therefore introduced into every dwelling. The deacons and deaconesses, as also the house-fathers and house-mothers, receive no compensation other than their own support and what is termed pocket-money, but are cared for in sickness and old age.

As a necessary part of the administration of such a colony, there are stewards, overseers, bookkeepers, collectors, drivers, and other persons variously employed, who reside in the colony with their families.

A further classification of the inmates is observed, based upon their mental and physical condition and their social standing. According to their ability to pay for their support there are four classes. First-, second-, and third-class patients are charged for support and care from \$100 to \$500 each per annum. Great numbers apply for admission who are not wholly dependent and cannot, therefore, be committed to the colony by public authorities; but they are so close to the line of dependency as to make them objects of commiseration. If there is room for them they are admitted free or at such rates as they or their relatives or guardians are able to pay, the principle always having been observed to deny no epileptic the benefits of colony life if it was possible to receive him.

The Provincial Councils contribute to the maintenance of such patients as belong to the class of the wholly dependent poor the daily per-capita allowance of one mark twenty pfennige, or about two dollars a week, which does not cover the cost of support. The somewhat dearer price of food during recent years, and the more stringent regulations of the Government, which place epileptics in the same category with the insane as to requirements for care, have made it necessary to ask the provincial authorities to increase the allowance to one mark thirty pfennige. A very large proportion of the expenses of the colony is met by voluntary contributions. Many gifts of charity are sent without special request, especially at Christmas time, and considerable sums are collected by children's societies. The liberality manifested in all ranks and conditions of society towards



EBENEZER (BETHEL COLONY).



BETHEL (BETHEL COLONY).



MAMRE—FARM RESIDENCE FOR EPILEPTICS.

this great and useful charity shows a spirit of philanthropy full of hopefulness for suffering humanity.

Institutions for epileptics and for the insane are under the supervision of a special commission appointed by the Government, and they are also frequently inspected by the district physician.

One of the most noteworthy characteristics of the colony is its industrial system. Even patients of the first class, who pay a high price for care, are not released from a share in the labor. No one enjoying a fair degree of physical health is allowed to pass his time in idleness. Weather permitting, patients are preferably given outdoor employment at farming, gardening, taking care of stock, raising fruit, seeds, etc. There are some twenty shops and departments for indoor work, which includes printing and bookbinding, boot- and shoe-making, and cabinet-work; also tailoring, saddlery, and basket-making. In the iron foundry, tin-shop, and blacksmith's shop, many patients are profitably employed. Brick-making is an important industry. In fact, a great variety of indoor and outdoor work is here followed, as in an ordinary village, even to the conducting of a post-office, which is in charge of an epileptic. Employment for women consists largely in household work, needle-work, and gardening.

A family of carpenters live in a house called Little Nazareth. The head of this family is a house-father, who is a carpenter, a trained nurse, and an evangelist. To him and his wife is committed the daily physical and spiritual welfare of the carpenter family. Each house has a staff of brother deacons at work among the patients, acting as foremen and sleeping in the night wards. So perfectly is the lost family life restored and so homelike are the conditions of the patients, that Pastor von Bodelschwingh says: " One

who goes through the great number of our workshops and finds throughout them the patients at their labor, will never get the impression that he is in an asylum for the sick; and it is only the couches placed in the workshops for patients who break down that remind one that there is anything unusual here. Even our schools, so far as they do not contain weak-minded epileptic children, are scarcely distinguishable from the usual elementary schools."

The useful employment of the patients, particularly in the occupations to which they have been accustomed, is continually emphasized by the physicians. Of the desirability of labor, Dr. Warnek says: "The blessing of labor to our epileptics is unmistakable. It diverts their thoughts to other circles of ideas, and its performance diverts the mind from ill temper and the practice of bad habits. Those patients who are still in a condition to work feel better, and are less excited and irritable. The hours for labor are so arranged as to leave time for recreation, for walking in the gardens and in the woods, playing in the open air, and for excursions. Winter naturally brings a contraction of these privileges and makes returnable a large number of attacks among the inmates of the houses."

The daily routine is as follows: The patients rise at an early hour and are served with a breakfast of bread and butter and coffee at 6.30. About two hours later the house-father conducts family worship, which is followed at nine o'clock by a breakfast similar to the first. Dinner is served at noon, consisting of soup, roast beef or veal, two kinds of vegetables, bread and butter, with stewed or baked apples, stewed prunes, pears, or peaches. The rules respecting diet are very strict. No pies, pudding, pastry, or sweetmeats of any kind are allowed. At 4 P.M., a fourth meal is served, made up of bread, plain or toasted, with butter and coffee.



ARIMATHEA—COTTAGE FOR 11 EPILEPTIC PATIENTS (BETHEL COLONY).



BRICK AND TILE WORKS (BETHEL COLONY).



REHOBOTH—FARMHOUSES.

FOR EPILEPTIC COLONISTS, AT WILHELMSDORF, BRANCH OF BETHEL COLONY.

From four o'clock until seven the patients are at liberty to amuse themselves as they please by walking, playing at games, engaging in harmless pastimes, or reading. The supper at seven consists of bread and butter and weak tea. For special cases cheese or sausage and occasionally hot boiled rice or macaroni are allowed. After supper the house-father again conducts family worship in the sitting-room of the home. A musical instrument, of which there is one in each house, is brought into requisition in this simple service. Nine o'clock is the retiring hour. In the intervals between the meals from five to seven hours are devoted to labor according to the capacity and strength of the patient. Various kinds of amusements and simple entertainments are provided for the evening. Children under fifteen years of age and capable of learning are instructed four hours daily in the schoolroom by deacons and deaconesses.

A new "cell house" for temporarily insane females was completed in 1895, of which the management says: "It is a great relief to us that by means of this building we are in a position to isolate quickly excited and insane female patients and also prevent excitement in other patients and possible acts of violence. This isolation is also necessary for the protection and curing of the sick themselves, as in a state of high excitement attempts at self-destruction are not rare. Shut up in a cell and resting in bed, the excited patient soonest becomes quiet. Many ask for temporary isolation themselves when threatened with approaching periods of excitement. This is an indication to us that it is not best to allow patients to reach a highly excited condition before giving them the benefit of seclusion and rest in bed. The necessity of this isolation is shown by the following figures. In the House Bethel there have been isolated in so short a period as six months : eight on account of attempts

at suicide; twenty on account of delirium; seventeen on account of confusion of mind; fifteen on account of deeds of violence."

Among other recent improvements at the colony is an assembly-hall with seating room for nearly 1500 persons. For years, Christmas presents and other gifts had been laid aside in order to prepare a suitable place of entertainment for the patients. The arrangement of the hall is such that the more feeble ones are admitted by separate entrances. The large flat roof of the building, provided with a high balustrade and embellished with shrubs and flowers, affords a refreshing and healthful retreat and place of amusement to certain female patients formerly confined to a small garden. A new bath-house has also been recently constructed. By means of the addition of a more powerful engine, the electric system has been extended so as to include the operating of an electric tramway for bringing the clay from its natural deposit to the brickyard.

Although Bethel Colony has been severely criticised in some quarters, on account of the specifically religious character of the institution, it must nevertheless be admitted on all sides that the self-sacrificing work accomplished there has been of incalculable benefit to humanity, and that in the development of this grand charity Pastor von Bodelschwingh and his co-laborers have displayed extraordinary courage, wisdom, and devotion.

The two provinces of Rhineland and Schleswig-Holstein, having had it in view to erect their own asylums for epileptics instead of sending them to the Bethel Colony near Bielefeld, appointed deputies to visit that institution and make report as to the best method to be pursued. The committee from Rhineland, which was commissioned to ascertain if patients of the Rhine Province could not be settled upon

a great farm in Hunsruck, came to the conclusion after a careful inspection of the colony that such care as could be provided in the Rhine Province for epileptics would be far inferior to that offered at Bielefeld.

The committee from the province of Schleswig-Holstein, which visited the institution in March, 1897, reported that Bethel was unsurpassed in its numerous possibilities for caring for and employing patients. The fears entertained in some quarters that the size of the institution interfered with individual treatment were dispelled by the unique plan of Bielefeld. It was reported that danger from unsanitary conditions common to large institutions was overcome by the favorable location of the buildings, which are scattered over the wooded hill and through the valleys lying on both sides, so that the inmates not only have an abundance of light and fresh air, but salutary prospects of beautiful surroundings. The conclusion was reached that better care could not be provided for epileptics than that secured at Bethel by the harmonious co-operation of the skilled medical men, the faithful spiritual leaders, and the excellent corps of trained attendants.

Of the good work that has been accomplished at Bethel Pastor Siebold says:

“ In the course of thirty-one years there has very gradually been formed here a community of 3500 souls, including the officers, attendants, and employees. In this colony many pitiable human beings lead a comparatively happy and contented life: If we could measure the degree of earthly happiness by the measure of thankfulness, our epileptic settlement would belong to the most fortunate places in our fatherland. There are many sighs and lamentations changed into songs and hymns of thanksgiving. Many homeless ones have found again a home and in many ways

a family life. Laborers without employment have here been able to return to the calling that was dear to them, and to enjoy a sense of independence which comes from self-support, although in many instances they overestimate the pecuniary value of their services. Severe suffering is here alleviated; milder and less frequent attacks take the place of the powerful shocks which so soon lead to idiocy; and a small number—from seven to eight per cent.—are entirely healed, or so far improved as to return to the ordinary duties and occupations of life. If suddenly returning attacks for a time cause discouragement, there still remains to the majority of our patients the fundamental frame of mind—‘We are on the way to recovery.’ Here everything is entirely different from the world outside. Their well-being and comfort are the first consideration. For them the bells are rung for church; for them the doors to schools and workshops open; for them are also prepared pleasures to which they are summoned by the sound of the trumpet, whether a national festival is to be celebrated or a walk taken through the woods of the Teutoburger mountains.

“So far does the care here ameliorate the suffering of the patients that most of them can enjoy a dignified human existence and many can perform gladdening and animating labor, while nearly all have the consciousness that they are not useless in the world. But when earthly hopes gradually fail, then have we still the joy to find in the greater part of our patients a resignation to God’s will, which lightens every sickness, and a peaceful readiness to enter the way into the Valley of the Shadow of Death.”

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